=> d l10 1-4 so ti ab au pn

L10 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2002 ACS
SO U.S., 47 pp. Cont.-in-part of U.S. 5,260.422.
CODEN: USXXAM
TI MHC class II-peptide conjugates useful in ameliorating autoimmunity
AB A novel method for treating autoimmune diseases uses a reagent which attacks only the cells of the immune system which are responsive to the autoantigen. The reagent is an MHC class II protein complex with an antigenic peptide, where the peptide comprises an epitope recognized by a T-cell specifically recognized by an autoantigen. Suitable autoimmune disease-assocd. autoantigens include myelin basic protein (in multiple sclerosis), acetylcholine receptor (in myasthenia gravis), and type II collagen (in rheumatoid arthritis). The MHC class II component has an antigen-binding pocket to which the autoantigenic peptide is bound so that the peptide is recognized by, and regulates the function of, the target T-cell. The complex may further include a radioisotope or other label for diagnostic purposes, or a toxin or other substance for therapeutic utility. Thus, a complex of mouse I-Ak with synthetic rat myelin basic protein peptide Ac-ASQKRPSQRHGSK was used to down-regulate T-cells from mice immunized against myelin basic protein, resulting in induction of nonresponsiveness or anergy.
IN Sharma, Somesh D.; Clark, Brian R.; Lerch, Bernard L.

PATENT NO.	KIND	DATE	
PI US 5468481	A	19951121	
US 5194425	A	19930316	
WO 8912459	A1	19891228	<--
AU 8939638	A1	19900112	<--
EP 423201	A1	19910424	<--
EP 423201	B1	19960612	
JP 03505731	T2	19911212	
JP 2755458	B2	19980520	
AT 139122	E	19960615	
EP 742014	A1	19961113	
CA 1340327	A1	19990119	
US 5130297	A	19920714	
US 5284935	A	19940208	
US 5260422	A	19931109	
AU 9219144	A1	19921117	
US 6106840	A	20000822	
US 6451314	B1	20020917	

L10 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2002 ACS
SO PCT Int. Appl., 47 pp.
CODEN: PIXXD2

TI Multiple sclerosis (MS) T-cell receptor for diagnosis and treatment of MS

AB Peptides of a portion of the T-cell receptor for an antigen that activates human immune response against myelin basic proteins (MBP) are useful as immunogens and in treatment of the symptoms of MS. A vaccine comprises attenuated VB17+ or VB12+ human T-cells from a human subject diagnosed with MS. Kits for diagnosing MS comprise nucleotide sequences encoding VB12, VB17, or complementary sequences. Amino acid residues 84-102 of human MBP are the immunodominant region recognized by a majority of peripheral T-cells isolated from MS patients. T-cells reacting with this epitope often also possessed the MHC class II haplotype DR2 gene. The MS T-cell lines predominantly used the VB17 or VB12 gene segments.

IN Wucherpfenning, Kai W.; Weiner, Howard L.; Hafler, David Allen

PATENT NO.	KIND	DATE	
PI WO 9115225	A1	19911017	<--
CA 2078549	AA	19911001	<--
AU 9178989	A1	19911030	
AU 651350	B2	19940721	
EP 522091	A1	19930113	
EP 522091	B1	20011212	
BR 9106303	A	19930413	
HU 63334	A2	19930830	
HU 217847	B	20000428	
JP 05507911	T2	19931111	
AT 210721	E	20011215	
ES 2169021	T3	20020701	
NO 9203778	A	19921116	
US 5858980	A	19990112	
US 6036957	A	20000314	
US 6077509	A	20000620	

L10 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2002 ACS

SO Neth. Appl., 42 pp.
CODEN: NAXXAN

TI Pharmaceutical mixture for suppression and diagnosis of multiple sclerosis

AB Synthetic peptides contg. certain glutamine-contg. sequences are inhibitors of exptl. allergic encephalomyelitis (EAE) in lab. animals, a model for human multiple sclerosis. Injected s.c., these peptides evoke a delayed hypersensitivity reaction in subjects with the disease, and are thus useful for diagnosis. EAE and autoimmune disease, was evoked in control guinea pigs by s.c. injection of 25 .mu.g Phe-Ser-Trp-Gly-Ala-Glu-Gly-Gln-Lys (I) [29705-91-7], a hydrolysis product of the myelin protein of the central nervous system, together with complete Freund's adjuvant. Induction of EAE was prevented in a 2nd group of I-treated guinea pigs by injection of Gly-Gly-Trp-(Gly)4-Gln-Lys [55203-17-3] (250 .mu.g/day s.c. for 14 days, beginning 0 or 7 days after injection of I). The synthetic

peptides were prepd. by the Merrifield solid-phase method.

PATENT NO.	KIND	DATE	
PI NL 7600523	A	19760722	<--
US 4113858	A	19780912	<--
GB 1528336	A	19781011	<--
CH 614698	A	19791214	<--
IL 48862	A1	19801231	<--
BE 837741	A1	19760514	<--
FR 2297633	A1	19760813	<--
FR 2297633	B1	19790223	
ZA 7600308	A	19770126	<--
CA 1092600	A1	19801230	<--

L10 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2002 ACS

SO U.S., 6 pp.
CODEN: USXXAM

TI Antidisease-producing synthetic materials for the prevention suppression and diagnosis of multiple sclerosis

AB The synthetic peptide, H-Gly-Gly-Trp-Gly-Gly-Gly-Gly-Gln-Lys-OH [55203-17-3] (25-1500 .mu.g), prevented allergic encephalomyelitis (EAE) induced by similar peptides in lab. animals. Since EAE is a model for multiple sclerosis in man, the peptide may be useful in prevention or diagnosis.

IN Hashim, George A.

PATENT NO.	KIND	DATE	
PI US 3864481	A	19750204	<--
US 4113858	A	19780912	<--
US 4230696	A	19801028	<--

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=> FIL REGISTRY

=> s hhpartahygslpqkshgrtqdenpvvhffknivtprtpppsqgkg/sqsp
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=> s l1 and (sclerosis or MS)
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L2          18 L1 AND (SCLEROSIS OR MS)

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'20010320' NOT A VALID FIELD CODE
   4 FILES SEARCHED...
L3          15 L2 AND PD<=20010320

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PROCESSING COMPLETED FOR L3
L4           15 DUP REM L3 (0 DUPLICATES REMOVED)

=> d l4 1-15 py ti so ab au kwic

L4   ANSWER 1 OF 15  CAPLUS  COPYRIGHT 2002 ACS
PY   2002
     1991
     1996
     1996
     1997
TI   Human myelin basic protein epitopes for modulating immune system and for
     treating multiple   ***sclerosis***
SO   U.S. Pat. Appl. Publ., 21 pp., Cont.-in-part of U.S. Ser. No. 125,407,
     abandoned.
     CODEN: USXXCO
AB   Methods for modulating the immune system of an animal, as well as
     tolerating such an immune system through the administration of one or more
     polypeptides derived from human myelin basic protein (hMBP), are provided.
     Such polypeptides include residues 87-99 of hMBP, as well as residues
     His-Phe-Phe-Lys and/or Lys-Ile-Phe-Lys of hMBP.  The method is esp. useful
     for treating multiple   ***sclerosis***  .
IN   Steinman, Lawrence; Zamvil, Scott
TI   Human myelin basic protein epitopes for modulating immune system and for
     treating multiple   ***sclerosis***
     PATENT NO.          KIND  DATE          APPLICATION NO.   DATE
     ----------          ----  --------      --------------    --------
PI   US 2002076412       A1    20020620      US 1995-484409    19950607
     WO 9117268          A1    19911114      WO 1991-US2991    19910501 <--
         W:  AU, CA, JP
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE
     EP 725277           A2    19960807      EP 1996-100852    19910501 <--
     EP 725277           A3    19961204
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE
```

US 5667967 A 19[illegible]0916 US 1993-66325 19930521 <--

AB . . . 87-99 of hMBP, as well as residues His-Phe-Phe-Lys and/or Lys-Ile-Phe-Lys of hMBP. The method is esp. useful for treating multiple ***sclerosis*** .

ST immunomodulator immune tolerance myelin basic protein; human myelin basic protein epitope multiple ***sclerosis***

IT Structure-activity relationship
(antigen-binding; human myelin basic protein epitopes for modulating immune system and for treating multiple ***sclerosis***)

IT Drug delivery systems
(carriers; human myelin basic protein epitopes for modulating immune system and for treating multiple ***sclerosis***)

IT DNA sequences
Epitopes
Human
Immunomodulators
Multiple ***sclerosis***
Protein sequences
(human myelin basic protein epitopes for modulating immune system and for treating multiple ***sclerosis***)

IT Myelin basic protein
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(human myelin basic protein epitopes for modulating immune system and for treating multiple ***sclerosis***)

IT Immune tolerance
(inducer; human myelin basic protein epitopes for modulating immune system and for treating multiple ***sclerosis***)

IT ***438070-01-0*** , Myelin basic protein (human precursor)
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amino acid sequence; human myelin basic protein epitopes for modulating immune system and for treating multiple ***sclerosis***)

IT 60998-20-1 115306-15-5 118506-26-6 124470-31-1 124470-32-2
158401-73-1 158401-74-2 163350-44-5 438002-44-9 438002-47-2
438002-49-4 438002-51-8 438002-53-0 438002-55-2 438002-57-4
438002-59-6 438002-63-2 438002-65-4 438002-66-5 438002-67-6
438002-68-7 438002-69-8 438002-71-2 438002-72-3 438002-73-4
438002-75-6 438002-77-8 438002-79-0 438002-83-6 438002-85-8
438002-87-0 438002-89-2 438002-91-6 438002-93-8 438002-95-0
438002-96-1 438002-97-2 438069-09-1 438069-10-4
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(human myelin basic protein epitopes for modulating immune system and for treating multiple ***sclerosis***)

IT 438070-02-1, DNA (human myelin basic protein cDNA)
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nucleotide sequence; human myelin basic protein epitopes for modulating immune system and for treating multiple ***sclerosis***)

IT 158401-69-5 158401-70-8 158401-71-9 158401-72-0 158401-75-3
158401-76-4 158401-77-5 158401-78-6 158401-79-7 158401-80-0
158401-81-1
RL: PRP (Properties)
(unclaimed sequence; human myelin basic protein epitopes for modulating immune system and for treating multiple ***sclerosis***)

L4 ANSWER 2 OF 15 CAPLUS COPYRIGHT 2002 ACS

PY 2002
1999

TI Nervous system-specific antigens and activated T cells for neuroprotection and neuronal degeneration inhibition

SO U.S. Pat. Appl. Publ., 93 pp., Cont.-in-part of U.S. Ser. No. 314,161.
CODEN: USXXCO

AB Compns. and methods to promote nerve regeneration or to confer neuroprotection and prevent or inhibit neuronal degeneration within the nervous system, either the central nervous system or the peripheral nervous system, are provided. Treatment involves administering NS-specific activated T cells, or an NS-specific antigen or analog thereof, a peptide derived therefrom or an analog or deriv. of said peptide, or a nucleotide sequence encoding said antigen or peptide, or any combination thereof. The NS-specific antigen is myelin basic protein, myelin oligodendrocyte glycoprotein, proteolipid, myelin-assocd. glycoprotein, S-100, .beta.-amyloid, Thy-1, P0, P2 or neurotransmitter receptor.

IN Eisenbach-Schwartz, Michal; Hauben, Ehud; Cohen, Irun R.; Beserman,

Pierre; Mosonego, Alon; M[redacted]lem, Gila

	PATENT NO.	KIND	DA[redacted]	APPLICATION NO.	DAT[redacted]
PI	US 2002072493	A1	20020613	US 2001-893348	20010628
	WO 9934827	A1	19990715	WO 1998-US14715	19980721 <--

W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, HR, HU, ID, IL, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

IT Nervous system
(amyotrophic lateral ***sclerosis*** ; nervous system-specific antigens and activated T cells for neuroprotection and neuronal degeneration inhibition)

IT ***437135-40-5*** , Myelin basic protein (human gene MBP) 437135-48-3, Proteolipid protein (human gene PLP) 437135-49-4 437135-54-1, Protein NogoA (Rattus norvegicus) 437135-55-2, Protein NogoB (Rattus norvegicus) 437135-56-3, Protein NogoC (Rattus norvegicus) 437135-57-4, Protein NogoA (human) 437135-58-5, Protein NogoB (human) 437135-59-6, Protein NogoC (human) 437135-60-9, Protein Nogo receptor (human) 437135-61-0, Protein Nogo receptor (Mus musculus)
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amino acid sequence; nervous system-specific antigens and activated T cells for neuroprotection and neuronal degeneration inhibition)

L4 ANSWER 3 OF 15 CAPLUS COPYRIGHT 2002 ACS

PY 2002
2001
2001
1999
2000

TI Methods for treatment of multiple ***sclerosis*** using peptide analogs of human myelin basic protein

SO U.S., 49 pp., Cont.-in-part of U.S. Ser. No. 137,759.
CODEN: USXXAM

AB The present invention is directed toward peptide analogs of human myelin basic protein. The peptide analog is at least seven amino acids long and derived from residues 83 to 99 of human myelin basic protein. The analogs are altered from the native sequence at least at positions 91, 95, or 97. Addnl. alterations may be made at other positions. Pharmaceutical compns. contg. these peptide analogs are provided. The peptide analogs are useful for treating multiple ***sclerosis*** .

IN Gaur, Amitabh; Conlon, Paul; Ling, Nicholas C.; Staehelin, Theophil; Crowe, Paul D.

TI Methods for treatment of multiple ***sclerosis*** using peptide analogs of human myelin basic protein

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6379670	B1	20020430	US 1999-378244	19990819
	US 6329499	B1	20011211	US 1994-342408	19941118
	US 6251396	B1	20010626	US 1998-137759	19980820
	AU 9936858	A1	19990826	AU 1999-36858	19990629 <--
	AU 723254	B2	20000824		

AB . . . made at other positions. Pharmaceutical compns. contg. these peptide analogs are provided. The peptide analogs are useful for treating multiple ***sclerosis*** .

ST multiple ***sclerosis*** peptide analog myelin basic protein sequence therapy

IT Human
(T-cells of; treatment of multiple ***sclerosis*** using peptide analogs of human myelin basic protein)

IT T cell (lymphocyte)
(helper cell/inducer, TH2, immune response; treatment of multiple ***sclerosis*** using peptide analogs of human myelin basic protein)

IT Multiple ***sclerosis***
Protein sequences
cDNA sequences
(treatment of multiple ***sclerosis*** using peptide analogs of human myelin basic protein)

IT Peptides, biological studies
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(treatment of multiple ***sclerosis*** using peptide analogs of

: human myelin basic protein)

IT Myelin basic protein
RL: PRP (Properties)
(treatment of multiple ***sclerosis*** using peptide analogs of human myelin basic protein)

IT 178823-49-9
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(treatment of multiple ***sclerosis*** using peptide analogs of human myelin basic protein)

IT 419018-12-5, 1: PN: US6379670 SEQID: 1 unclaimed DNA
RL: PRP (Properties)
(unclaimed nucleotide sequence; methods for treatment of multiple ***sclerosis*** using peptide analogs of human myelin basic protein)

IT ***419018-13-6***
RL: PRP (Properties)
(unclaimed protein sequence; methods for treatment of multiple ***sclerosis*** using peptide analogs of human myelin basic protein)

IT 178823-45-5 419018-14-7 419018-15-8 419018-16-9 419018-17-0
RL: PRP (Properties)
(unclaimed sequence; methods for treatment of multiple ***sclerosis*** using peptide analogs of human myelin basic protein)

L4 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2002 ACS

PY 2001
1993
2001
2002

TI Peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple ***sclerosis*** patients

SO U.S., 41 pp., Cont.-in-part of U.S. Ser. No. 7,520.
CODEN: USXXAM

AB Human myelin basic protein (h-MBP) has a mol. wt. of 18.5 KD and contains 170 amino acid residues. Synthetic peptides ranging in length from about 8 to 25 residues and covering the entire length of the protein have been produced. Antibodies to h-MBP (anti-MBP) were found to be neutralized by the synthetic peptides, in vitro, which span the h-MBP from about amino acid residue 61 to about amino acid residue 106. The peptides, which cover both the amino (about residues 1 to 63) and carboxy (about residues 117 to 162) terminals of h-MBP did not neutralize purified anti-MBP. Intrathecal administration of peptide MBP(75-95), MBP(86-95), or MBP(82-98) produced complete binding-neutralization of free (F) anti-MBP with no change in bound (B) levels. A control peptide MBP35-58 had no effect on F or B anti-MBP levels. I.v. administration of MBP(75-95), MBP(86-95), or MBP(82-98) resulted in significant decline of F and B CSF anti-MBP levels. Administration of MBP synthetic peptides to ***MS*** patients either intrathecally or i.v. did not have any adverse neurol. effects and systemic complications did not occur. The MBP epitope for ***MS*** anti-MBP has been localized to an area between amino acid 86 and amino acid 95.

IN Warren, Kenneth G.; Catz, Ingrid

TI Peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple ***sclerosis*** patients

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6252040	B1	20010626	US 1998-55263	19980406
CA 2053799	AA	19930423	CA 1991-2053799	19911022 <--
US 6258781	B1	20010710	US 1998-7520	19980115
US 2002111312	A1	20020815	US 2001-813383	20010320

PI

AB . . . MBP(86-95), or MBP(82-98) resulted in significant decline of F and B CSF anti-MBP levels. Administration of MBP synthetic peptides to ***MS*** patients either intrathecally or i.v. did not have any adverse neurol. effects and systemic complications did not occur. The MBP epitope for ***MS*** anti-MBP has been localized to an area between amino acid 86 and amino acid 95.

ST multiple ***sclerosis*** peptide neutralizing antibody myelin basic protein

IT Myelin basic protein
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(autoantibodies to; peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple ***sclerosis*** patients)

IT Antibodies

RL: ADV (Adverse effect, including toxicity); BPR (Biological process); BSU (Biological study, unclassified); REM (Removal or disposal); BIOL (Biological study); PROC (Process)
(autoantibodies, to myelin basic protein; peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple ***sclerosis*** patients)

IT Drug delivery systems
(carriers; peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple ***sclerosis*** patients)

IT Drug delivery systems
(injections, i.v.; peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple ***sclerosis*** patients)

IT Drug delivery systems
(injections, intrathecal; peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple ***sclerosis*** patients)

IT Multiple ***sclerosis***
Protein sequences
(peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple ***sclerosis*** patients)

IT Peptides, biological studies
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple ***sclerosis*** patients)

IT ***11084-77-8*** , Myelin basic protein (human)
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)
(amino acid sequence; peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple ***sclerosis*** patients)

IT 144449-89-8 144449-90-1 144449-94-5 152074-97-0 155029-61-1
160219-22-7 160219-24-9 171205-21-3 178273-99-9 346426-58-2
346426-60-6
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple ***sclerosis*** patients)

L4 ANSWER 5 OF 15 CAPLUS COPYRIGHT 2002 ACS

PY 2001
2001
1996
1999
2000
2000
2000
2001
2002
2002

TI Methods for treatment of multiple ***sclerosis*** using peptide analogs of human myelin basic protein

SO U.S., 33 pp., Cont.-in-part of U.S. Ser. No. 342,408.
CODEN: USXXAM

AB The present invention is directed toward peptide analogs of human myelin basic protein. The peptide analog is at least seven amino acids long and derived from residues 83 to 99 of human myelin basic protein. The analogs are altered from the native sequence at least at positions 91, 95, or 97. Addnl. alterations may be made at other positions. Pharmaceutical compns. contg. these peptide analogs are provided. The peptide analogs are useful for treating multiple ***sclerosis*** .

IN Gaur, Amitabh; Conlon, Paul; Ling, Nicholas C.; Staehelin, Theophil; Crowe, Paul D.

TI Methods for treatment of multiple ***sclerosis*** using peptide analogs of human myelin basic protein

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6251396	B1	20010626	US 1998-137759	19980820
	US 6329499	B1	20011211	US 1994-342408	19941118

CA 2204147 AA 1[redacted]60530 CA 1995-2204147 19[redacted]1116 <--
AU 9936858 A1 19990826 AU 1999-36858 19990629 <--
AU 723254 B2 20000824
WO 2000011027 A1 20000302 WO 1999-US19033 19990819 <--
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
AU 9960200 A1 20000314 AU 1999-60200 19990819 <--
EP 1105419 A1 20010613 EP 1999-967832 19990819
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
US 6379670 B1 20020430 US 1999-378244 19990819
US 2002086976 A1 20020704 US 2001-15540 20011211

AB . . . made at other positions. Pharmaceutical compns. contg. these peptide analogs are provided. The peptide analogs are useful for treating multiple ***sclerosis*** .

ST multiple ***sclerosis*** myelin basic protein peptide

IT Alums
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(adjuvant; treatment of multiple ***sclerosis*** using peptide analogs of human myelin basic protein)

IT Immunostimulants
(adjuvants; treatment of multiple ***sclerosis*** using peptide analogs of human myelin basic protein)

IT Drug delivery systems
(carriers; treatment of multiple ***sclerosis*** using peptide analogs of human myelin basic protein)

IT T cell (lymphocyte)
(helper cell/inducer, TH2, immune response; treatment of multiple ***sclerosis*** using peptide analogs of human myelin basic protein)

IT Myelin basic protein
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(peptide analogs; treatment of multiple ***sclerosis*** using peptide analogs of human myelin basic protein)

IT Multiple ***sclerosis***
Protein sequences
cDNA sequences
(treatment of multiple ***sclerosis*** using peptide analogs of human myelin basic protein)

IT Peptides, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(treatment of multiple ***sclerosis*** using peptide analogs of human myelin basic protein)

IT 178823-45-5 178823-46-6 178823-47-7 178823-48-8 178823-49-9 178823-50-2
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(treatment of multiple ***sclerosis*** using peptide analogs of human myelin basic protein)

IT 242133-54-6
RL: PRP (Properties)
(unclaimed nucleotide sequence; methods for treatment of multiple ***sclerosis*** using peptide analogs of human myelin basic protein)

IT ***11084-77-8***
RL: PRP (Properties)
(unclaimed protein sequence; methods for treatment of multiple ***sclerosis*** using peptide analogs of human myelin basic protein)

L4 ANSWER 6 OF 15 CAPLUS COPYRIGHT 2002 ACS
PY 2000
2002
2002
TI DNA vaccination for treatment of autoimmune disease
SO PCT Int. Appl., 50 pp.

CODEN: PIXXD2

AB A pro-inflammatory T cell response is specifically suppressed by the injection into a recipient of DNA encoding an autoantigen assocd. with autoimmune disease. The autoantigen is e.g. myelin protein, proteolipid protein, myelin basic protein, myelin oligodendrocyte protein, and myelin-assocd. protein. The recipient may be further treated by co-vaccination with a DNA encoding a Th2 cytokine, particularly encoding IL4. In response to the vaccination, the proliferation of autoantigen-reactive T cells and the secretion of Th1 cytokines, including IL-2, IFN-.gamma. and IL-15, are reduced.

IN Steinman, Lawrence; Ruiz, Pedro Jose; Garren, Hideki

PI WO 2000053019 A1 ***20000914***

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000053019	A1	20000914	WO 2000-US6233	20000310 <--
W: CA, JP, US, ZA				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1168923	A1	20020109	EP 2000-912207	20000310
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
US 2002068715	A1	20020606	US 2001-947770	20010905

IT Autoimmune disease
DNA sequences
Inflammation
Mammal (Mammalia)
Molecular cloning
Multiple ***sclerosis***
Plasmids
Protein sequences
Transplant and Transplantation
Vaccines
(DNA vaccine encoding autoantigen and Th2 cytokine for treatment of autoimmune disease)

IT ***11084-77-8P*** 104950-38-1P, Interleukin 4 (human clone 46 precursor protein moiety reduced) 294215-32-0P, Proteolipid protein (human)
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(amino acid sequence; DNA vaccine encoding autoantigen and Th2 cytokine for treatment of autoimmune disease)

L4 ANSWER 7 OF 15 CAPLUS COPYRIGHT 2002 ACS

PY 2000
2001
2000
2001

TI Methods for treatment of multiple ***sclerosis*** using peptide analogs of human myelin basic protein

SO PCT Int. Appl., 112 pp.
CODEN: PIXXD2

AB Peptide analogs of human myelin basic protein are disclosed. The peptide analogs are at least seven amino acids long and derived from residues 83-99 of human myelin basic protein. The analogs are altered from the native sequence at least at positions 91, 95 or 97. Addnl. alterations may be made at other positions. Pharmaceutical compns. contg. these peptide analogs are provided. The peptide analogs are useful for inducing a Th2 immune response to myelin basic protein and treating multiple ***sclerosis*** .

IN Gaur, Amitabh; Conlon, Paul; Ling, Nicholas C.; Staehlin, Theophil; Crowe, Paul

TI Methods for treatment of multiple ***sclerosis*** using peptide analogs of human myelin basic protein

PI WO 2000011027 A1 ***20000302***

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000011027	A1	20000302	WO 1999-US19033	19990819 <--
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,				

CI, CM, GA, GN, [redacted] ML, MR, NE, SN, TD, TG

US 6251396	B1	20[redacted]0626	US 1998-137759	199[redacted]820	
AU 9960200	A1	20000314	AU 1999-60200	19990819	<--
EP 1105419	A1	20010613	EP 1999-967832	19990819	

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

AB . . . are provided. The peptide analogs are useful for inducing a Th2 immune response to myelin basic protein and treating multiple ***sclerosis*** .

ST myelin basic protein peptide multiple ***sclerosis*** ; Th2 immunity myelin basic protein peptide

IT Cell proliferation
(T cell; peptide analogs of human myelin basic protein for treatment of multiple ***sclerosis***)

IT Cytotoxic agents
(T-cell; peptide analogs of human myelin basic protein for treatment of multiple ***sclerosis***)

IT Interleukin 10
Interleukin 13
Interleukin 4
Interleukin 5
Interleukin 9
Tumor necrosis factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(TNF-.alpha.; peptide analogs of human myelin basic protein for treatment of multiple ***sclerosis***)

IT Peptides, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(analogs; peptide analogs of human myelin basic protein for treatment of multiple ***sclerosis***)

IT Encephalomyelitis
(autoimmune; peptide analogs of human myelin basic protein for treatment of multiple ***sclerosis***)

IT T cell (lymphocyte)
(helper cell/inducer, TH1; peptide analogs of human myelin basic protein for treatment of multiple ***sclerosis***)

IT T cell (lymphocyte)
(helper cell/inducer, TH2; peptide analogs of human myelin basic protein for treatment of multiple ***sclerosis***)

IT Drug delivery systems
Immunomodulators
(peptide analogs of human myelin basic protein for treatment of multiple ***sclerosis***)

IT Myelin basic protein
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(peptide analogs of human myelin basic protein for treatment of multiple ***sclerosis***)

IT Proliferation inhibition
(proliferation inhibitors, T-cell; peptide analogs of human myelin basic protein for treatment of multiple ***sclerosis***)

IT T cell (lymphocyte)
(proliferation; peptide analogs of human myelin basic protein for treatment of multiple ***sclerosis***)

IT Protein degradation
(redn. of; peptide analogs of human myelin basic protein for treatment of multiple ***sclerosis***)

IT Multiple ***sclerosis***
(therapeutic agents; peptide analogs of human myelin basic protein for treatment of multiple ***sclerosis***)

IT Interferons
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(.gamma., TNF-.alpha.; peptide analogs of human myelin basic protein for treatment of multiple ***sclerosis***)

IT Amino acids, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(D-; peptide analogs of human myelin basic protein for treatment of multiple ***sclerosis***)

IT

118506-26-6	158401-73-1	158401-77-5	158401-79-7	178696-41-8
178696-42-9	178696-43-0	178696-44-1	178696-45-2	178696-46-3
178696-47-4	178696-48-5	178696-49-6	178823-45-5	178823-51-3
178823-52-4	178823-53-5	178823-54-6	178823-55-7	178823-56-8

178823-57-9 178823-58-[redacted] 178823-59-1 178823-60-4 178823-61-5
178823-62-6 178823-63-[redacted] 178823-64-8 178823-65-9 178823-66-0
178823-67-1 179866-71-8 179866-72-9 179866-73-0
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(peptide analogs of human myelin basic protein for treatment of multiple ***sclerosis***)

IT 178823-45-5D, analogs 178823-46-6 178823-47-7 178823-48-8
178823-49-9 178823-50-2
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(peptide analogs of human myelin basic protein for treatment of multiple ***sclerosis***)

IT 259726-96-0
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(peptide analogs of human myelin basic protein for treatment of multiple ***sclerosis***)

IT 242133-54-6
RL: PRP (Properties)
(unclaimed nucleotide sequence; methods for treatment of multiple ***sclerosis*** using peptide analogs of human myelin basic protein)

IT ***11084-77-8***
RL: PRP (Properties)
(unclaimed protein sequence; methods for treatment of multiple ***sclerosis*** using peptide analogs of human myelin basic protein)

L4 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2002 ACS

PY 1999
1999
1999
2001
2002

TI Use of neglected target tissue antigens in modulation of immune responses

SO PCT Int. Appl., 79 pp.
CODEN: PIXXD2

AB Disclosed are methods for identifying antigens, termed neglected target tissue antigens (NTTA), that do not become involved as targets of an abnormal immune response (such as allergy or autoimmunity or more generally inflammation); also disclosed are methods of using NTTA for inducing regulatory responses and thereby abating abnormal inflammatory immune responses. The NTTA peptide is selected from insulin, glutamic acid decarboxylase, amylin, calbindin, islet amyloid polypeptide precursor, neuropeptide Y, myelin basic protein proteolipid protein, oligodendrocyte myelin glycoprotein, cartilage oligomeric matrix protein, decorin, link protein and precursors, rhodopsin, interphotoreceptor retinoid-binding protein, retinoid binding protein, retinal phosphodiesterase, bestrophin, and peripherin.

IN Kaufman, Daniel L.; Tian, Jide; Olcott, Angelica

PI WO 9956763 A1 ***19991111***

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9956763	A1	19991111	WO 1999-US10250	19990507 <--
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2328108	AA	19991111	CA 1999-2328108	19990507 <--
AU 9938966	A1	19991123	AU 1999-38966	19990507 <--
EP 1094828	A1	20010502	EP 1999-921860	19990507
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002513765	T2	20020514	JP 2000-546787	19990507

IT Allergy
Autoimmune disease
Immune tolerance
Immunotherapy
Inflammation
Multiple ***sclerosis***
Protein sequences

Rheumatoid arthritis
(neglected target tissue antigens or NTTA peptides for treating autoimmune diseases, allergies and inflammations)

IT 92307-59-0 102037-53-6, Glycoprotein (rat cartilage link protein moiety reduced) 103715-96-4, Glycoprotein (chicken cartilage link precursor protein moiety reduced) 106282-91-1 ***111518-60-6*** , Protein (human clone RK187 20.2-kilodalton myelin basic) 112956-39-5, Protein (human clone HBSC21/HBSC27 vitamin D-dependent calcium-binding reduced) 117871-30-4 135846-19-4, Calretinin (human reduced) 136894-84-3, Glycoprotein (human clone HLP(C)-1/HLP(C)-2 cartilage link precursor protein moiety reduced) 145187-60-6 148972-55-8, Calcyclin (rabbit clone pCalC) 169742-92-1 180033-06-1 219678-53-2 250232-16-7 250232-19-0 250232-25-8 250232-32-7 250232-34-9 250232-40-7 250241-17-9
RL: PRP (Properties)
(unclaimed protein sequence; use of neglected target tissue antigens in modulation of immune responses)

L4 ANSWER 9 OF 15 CAPLUS COPYRIGHT 2002 ACS
PY 1999
TI Methods for treatment of multiple ***sclerosis*** utilizing peptide analogues of human myelin basic protein
SO U.S., 35 pp., Cont.-in-part of U.S. Ser. No. 402,992, abandoned.
CODEN: USXXAM
AB The present invention provides peptide analogs of human myelin basic protein (MBP) which are suitable for the treatment of multiple ***sclerosis*** . Within one aspect, peptide analogs are at least seven amino acids long and derived from residues 86 to 99 of human MBP. In addn., such analogs may be altered from the native sequence at positions 87, 88, 97, 98 or 99 to a D-amino acid. Addnl. alterations may be made at other positions. Pharmaceutical compns. contg. these peptide analogs are also provided, as well as methods for treating multiple ***sclerosis*** . The ability of MBP peptides and peptide analogs to bind to MHC is measured. For example, the peptide analog h88 contg. amino acids 86-99 of human MBP in which L-histidine at residue 88 is altered to D-histidine (50 .mu.M) inhibited the binding of biotinylated MBP 86-99 to a greater extend than did MBP 87-99 (50 .mu.M). It can be inferred that binding of h88 to MHC Class II mols. is greater than that of MBP 86-99. In addn., A97, another peptide analog which consists of amino acids 86-99 of human MBP, except that L-arginine at residue 97 is altered to L-alanine, inhibited binding of biotin-labeled MBP 86-99 to MHC.
IN Gaur, Amitabh; Conlon, Paul J.; Ling, Nicholas
TI Methods for treatment of multiple ***sclerosis*** utilizing peptide analogues of human myelin basic protein
PI US 5948764 A ***19990907***

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5948764	A	19990907	US 1997-781122	19970109 <--

AB The present invention provides peptide analogs of human myelin basic protein (MBP) which are suitable for the treatment of multiple ***sclerosis*** . Within one aspect, peptide analogs are at least seven amino acids long and derived from residues 86 to 99 of. . . made at other positions. Pharmaceutical compns. contg. these peptide analogs are also provided, as well as methods for treating multiple ***sclerosis*** . The ability of MBP peptides and peptide analogs to bind to MHC is measured. For example, the peptide analog h88. . .
ST myelin basic protein peptide multiple ***sclerosis***
IT Histocompatibility antigens
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(MHC (major histocompatibility complex), binding to; peptide analogs of human myelin basic protein for treatment of multiple ***sclerosis***)
IT Histocompatibility antigens
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(MHC (major histocompatibility complex), class II, binding to; peptide analogs of human myelin basic protein for treatment of multiple ***sclerosis***)
IT Cell activation
Cell proliferation
(T cell; peptide analogs of human myelin basic protein for treatment of multiple ***sclerosis***)
IT T cell (lymphocyte)
(activation; peptide analogs of human myelin basic protein for treatment of multiple ***sclerosis***)

IT Encephalomyelitis
(autoimmune, induction and treatment of; peptide analogs of human myelin basic protein for treatment of multiple ***sclerosis***)

IT Interleukin 2
Interleukin 4
RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)
(induction of; peptide analogs of human myelin basic protein for treatment of multiple ***sclerosis***)

IT Apoptosis
DNA sequences
Multiple ***sclerosis***
Protein sequences
(peptide analogs of human myelin basic protein for treatment of multiple ***sclerosis***)

IT Myelin basic protein
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(peptide analogs of human myelin basic protein for treatment of multiple ***sclerosis***)

IT T cell (lymphocyte)
(proliferation; peptide analogs of human myelin basic protein for treatment of multiple ***sclerosis***)

IT Multiple ***sclerosis***
(therapeutic agents; peptide analogs of human myelin basic protein for treatment of multiple ***sclerosis***)

IT Interferons
RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)
(.gamma., induction of; peptide analogs of human myelin basic protein for treatment of multiple ***sclerosis***)

IT ***11084-77-8***
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(amino acid sequence; peptide analogs of human myelin basic protein for treatment of multiple ***sclerosis***)

IT 242133-54-6
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(nucleotide sequence; peptide analogs of human myelin basic protein for treatment of multiple ***sclerosis***)

IT 183544-81-2 183544-82-3
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(peptide analogs of human myelin basic protein for treatment of multiple ***sclerosis***)

L4 ANSWER 10 OF 15 CAPLUS COPYRIGHT 2002 ACS

PY 1996
1996
1996
1998
1999

TI Modified myelin protein molecules for diagnosis and treatment of multiple ***sclerosis***

SO PCT Int. Appl., 155 pp.
CODEN: PIXXD2

AB Mols. related to the human proteolipid protein (PLP) and/or human myelin basic protein (MBP) are provided for the clin. assessment, diagnosis, and treatment of multiple ***sclerosis*** . The mols. include nucleic acids which are useful in the prodn. of modified PLP polypeptides and modified MBP polypeptides, such polypeptides being useful for assaying T-cells for responsiveness to PLP and MBP epitopes. The polypeptides are also useful as therapeutic agents that act by inducing T-cell responses, including anergy and apoptosis, as means of treating multiple ***sclerosis*** . Construction of bacterial vectors directing the expression of MBP polypeptides and PLP muteins, and purifn. and characterization of recombinant MBP, are described. The PLP polypeptides induced T-cell responses and affected T-cell reactivity to a variety of MBP and PLP epitopes, and can induce, prevent, and treat exptl. allergic encephalomyelitis.

IN Mueller, John P.; Lenardo, Michael J.; McFarland, Henry F.; Matis, Louis; Mueller, Eileen Elliott; Nye, Steven H.; Pelfrey, Clara M.; Squinto, Stephen P.; Wilkins, James A.

TI Modified myelin protein molecules for diagnosis and treatment of multiple ***sclerosis***

PI WO 9634622 A1 ***19961107***

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9634622	A1	19961107	WO 1996-US5611	19960422 <--
W: AL, AM, AU, BB, BG, BR, CA, CN, CZ, EE, FI, GE, HU, IS, JP, KG, KP, KR, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2218858	AA	19961107	CA 1996-2218858	19960422 <--
AU 9655658	A1	19961121	AU 1996-55658	19960422 <--
EP 830139	A1	19980325	EP 1996-913035	19960422 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE, PT, IE				
JP 11511650	T2	19991012	JP 1996-533344	19960422 <--

AB . . . proteolipid protein (PLP) and/or human myelin basic protein (MBP) are provided for the clin. assessment, diagnosis, and treatment of multiple ***sclerosis*** . The mols. include nucleic acids which are useful in the prodn. of modified PLP polypeptides and modified MBP polypeptides, such. . . also useful as therapeutic agents that act by inducing T-cell responses, including anergy and apoptosis, as means of treating multiple ***sclerosis*** . Construction of bacterial vectors directing the expression of MBP polypeptides and PLP muteins, and purifn. and characterization of recombinant MBP,. . .

ST recombinant myelin protein multiple ***sclerosis*** ; proteolipid protein recombinant multiple ***sclerosis***

IT Glycolipoproteins
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(OM, fusion products, with proteolipid protein; modified myelin proteins for diagnosis and treatment of multiple ***sclerosis***)

IT Bacteria (Eubacteria)
(expression vectors; modified myelin proteins for diagnosis and treatment of multiple ***sclerosis***)

IT Gene, animal
RL: BPN (Biosynthetic preparation); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PREP (Preparation); PROC (Process)
(for myelin basic protein of human; modified myelin proteins for diagnosis and treatment of multiple ***sclerosis***)

IT Bioassay
(for myelin basic protein; modified myelin proteins for diagnosis and treatment of multiple ***sclerosis***)

IT Diagnosis
Immune tolerance
Multiple ***sclerosis***
T cell (lymphocyte)
(modified myelin proteins for diagnosis and treatment of multiple ***sclerosis***)

IT Myelin basic protein
Proteolipid protein
RL: ANT (Analyte); BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(modified myelin proteins for diagnosis and treatment of multiple ***sclerosis***)

IT Blood
Cerebrospinal fluid
Lymph node
(myelin basic protein in, T-cell tolerance by; modified myelin proteins for diagnosis and treatment of multiple ***sclerosis***)

IT Nucleic acids
RL: BPN (Biosynthetic preparation); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PREP (Preparation); PROC (Process)
(myelin basic protein-specifying and proteolipid protein-specifying; modified myelin proteins for diagnosis and treatment of multiple ***sclerosis***)

IT ***104138-16-1P*** , Protein (human 21.5-kilodalton myelin basic) 184828-49-7P ***184890-65-1P*** 184890-66-2P 184890-67-3P ***184890-68-4P*** ***184890-69-5P*** ***184890-70-8P*** ***184890-71-9P*** 184890-72-0P 184890-80-0P, Proteolipid protein (human mutein .DELTA.PLP3) 184890-81-1P, Proteolipid protein (human

mutein .DELTA.PLP4)
RL: ANT (Analyte); BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(modified myelin proteins for diagnosis and treatment of multiple ***sclerosis***)

IT 111518-37-7P, DNA (human clone RK41 21.5-kilodalton myelin basic protein cDNA) 184890-73-1P 184890-74-2P 184890-75-3P 184890-76-4P 184890-77-5P 184890-78-6P 184890-79-7P
RL: BPN (Biosynthetic preparation); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PREP (Preparation); PROC (Process)
(modified myelin proteins for diagnosis and treatment of multiple ***sclerosis***)

L4 ANSWER 11 OF 15 CAPLUS COPYRIGHT 2002 ACS

PY 1996
1996
1996
1996
1996
1997
1997
1998
1998
1997
1997

TI Myelin autoantigen-derived peptide compositions and treatment for multiple ***sclerosis***

SO PCT Int. Appl., 90 pp.
CODEN: PIXXD2

AB The present invention provides isolated peptides and combinations of peptides derived form myelin autoantigens such as MBP, MOG, PLP, and MAG suitable for treating multiple ***sclerosis*** , including prophylactic and therapeutic compns. and methods for preventing or treating multiple ***sclerosis*** . Preferred compns. of the invention comprise at least one isolated, purified peptide, free from all other polypeptides or contaminants, the peptide comprising an amino acid sequence, the myelin autoantigen which has T cell activity. A therapeutic compn. of the invention is capable of down regulating the autoantigen specific immune response to the myelin autoantigen in a population of humans suffering from, or susceptible to multiple ***sclerosis*** , such that disease symptoms are reduced, eliminated, or reversed and/or the onset or progression of disease symptoms is prevented or slowed. Addnl., compns. and methods of the instant invention when administered in an advanced stage of disease, reverse ongoing paralysis or other signs of disease when administered during the acute phase of disease or prevents relapse when administered during remission.

IN Smilek, Dawn; Samson, Michael; Gefter, Malcolm; Hsu, Di-Hwei; Shi, Jia-Dong; Paliard, Xavier; Devaux, Brigitte; Rothbard, Jonathan; Franzen, Henry

TI Myelin autoantigen-derived peptide compositions and treatment for multiple ***sclerosis***

PI WO 9612737 A2 ***19960502***

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9612737	A2	19960502	WO 1995-US13682	19951025 <--
WO 9612737	A3	19961010		
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2203629	AA	19960502	CA 1995-2203629	19951025 <--
AU 9642782	A1	19960515	AU 1996-42782	19951025 <--
ZA 9509033	A	19960611	ZA 1995-9033	19951025 <--
EP 787147	A1	19970806	EP 1995-941330	19951025 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
BR 9509438	A	19971223	BR 1995-9438	19951025 <--
HU 77047	A2	19980302	HU 1997-1843	19951025 <--
JP 10504039	T2	19980414	JP 1995-514109	19951025 <--
FI 9701750	A	19970624	FI 1997-1750	19970424 <--

NO 9701900 A 1[redacted]70625 NO 1997-1900 19[redacted]0424 <--

AB . . . peptides and combinations of peptides derived from myelin autoantigens such as MBP, MOG, PLP, and MAG suitable for treating multiple ***sclerosis*** , including prophylactic and therapeutic compns. and methods for preventing or treating multiple ***sclerosis*** . Preferred compns. of the invention comprise at least one isolated, purified peptide, free from all other polypeptides or contaminants, the. . . the autoantigen specific immune response to the myelin autoantigen in a population of humans suffering from, or susceptible to multiple ***sclerosis*** , such that disease symptoms are reduced, eliminated, or reversed and/or the onset or progression of disease symptoms is prevented or. . .

ST myelin autoantigen peptide multiple ***sclerosis*** therapy; antigen auto myelin peptide multiple ***sclerosis***

IT Autoimmune disease
Immunity
Mammal
Multiple ***sclerosis***
Protein sequences
(myelin autoantigen-derived peptide compns. and treatment for multiple ***sclerosis***)

IT Glycophosphoproteins
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(MAG (myelin-assocd. glycoprotein), myelin autoantigen-derived peptide compns. and treatment for multiple ***sclerosis***)

IT Phospholipoproteins
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(MBP (myelin basic protein), myelin autoantigen-derived peptide compns. and treatment for multiple ***sclerosis***)

IT Histocompatibility antigens
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(MHC (major histocompatibility antigen complex), class II, T cell receptor binding; myelin autoantigen-derived peptide compns. and treatment for multiple ***sclerosis***)

IT Glycoproteins, specific or class
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(MOG (myelin-oligodendroglial glycoprotein), myelin autoantigen-derived peptide compns. and treatment for multiple ***sclerosis***)

IT Lymphocyte
(T-cell, myelin autoantigen-derived peptide compns. and treatment for multiple ***sclerosis***)

IT Antigen receptors
Receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(TCR (T-cell antigen receptor), MHC class II antigen binding; myelin autoantigen-derived peptide compns. and treatment for multiple ***sclerosis***)

IT Antigens
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(auto-, myelin; myelin autoantigen-derived peptide compns. and treatment for multiple ***sclerosis***)

IT Phospholipoproteins
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(lipophilins, myelin autoantigen-derived peptide compns. and treatment for multiple ***sclerosis***)

IT Interferons
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.beta., myelin autoantigen-derived peptide compns. and treatment for multiple ***sclerosis***)

IT 178304-40-0
RL: PRP (Properties)
(amino acid sequence; myelin autoantigen-derived peptide compns. and treatment for multiple ***sclerosis***)

IT ***124364-89-2*** , Phospholipoprotein MBP (human 18.5-kilodalton isoform C-8 deblocked protein moiety)
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amino acid sequence; myelin autoantigen-derived peptide compns. and treatment for multiple ***sclerosis***)

IT 118506-26-6 129988-07-4 129988-08-5 129988-09-6 130184-08-6
130184-09-7 152074-94-7 152074-95-8 152074-96-9 152074-97-0
152074-98-1 152075-00-8 152075-01-9 152075-02-0 152075-87-1
152846-85-0 152870-67-2 164981-18-4 164981-31-1 164981-49-1
164981-50-4 164981-51-5 164981-52-6 167319-80-4 173071-55-1
173071-56-2 178328-55-7 178328-56-8 178328-57-9 178328-58-0
178328-59-1 178328-60-4 178328-61-5 178328-62-6 178328-63-7
178328-64-8 178328-65-9 178328-66-0 178328-67-1 178328-68-2
178328-69-3 178328-70-6 178328-71-7 178328-72-8 178328-73-9
178328-74-0 178328-75-1 178328-76-2 178328-77-3 178328-78-4
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(myelin autoantigen-derived peptide compns. and treatment for multiple ***sclerosis***)

L4 ANSWER 12 OF 15 CAPLUS COPYRIGHT 2002 ACS
PY 1996
1996
1996
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1997
TI Myelin basic protein peptides for treatment of multiple ***sclerosis*** patients
SO PCT Int. Appl., 52 pp.
CODEN: PIXXD2
AB Peptides R1-Val-His-Phe-Phe-Lys-Asn-Ile-R2 (R1,R2=H, OH, amino acid, peptide; R1.noteq.R2=H,OH) derived from myelin basic protein, which are capable of neutralizing or modulating prodn. of anti-myelin basic protein antibodies, are claimed. These peptides may be used in treatment of multiplex ***sclerosis*** . Human myelin basic protein (h-MBP) has a mol. wt. of 18.5 KD and contains 170 amino acid residues. Synthetic peptides ranging in length from about 8 to 25 residues and covering the entire length of the protein have been produced. Antibodies to h-MBP (anti-MBP) were found to be neutralized by the synthetic peptides, in vitro, which span the h-MBP from about amino acid residue 61 to about amino acid residue 106. The peptides, which cover both the amino (about residues 1 to 63) and carboxy (about residues 117 to 162) terminals of h-MBP did not neutralize purified anti-MBP. Intrathecal administration of peptide MBP75-95, either as a single dose, or as repeated injections for periods up to 10 wk, produced complete binding-neutralization of free (F) anti-MBP with no change in bound (B) levels. A control peptide MBP35-58 had no effect on F or B anti-MBP levels. I.v. administration of MBP75-95 resulted in significant decline of F and B CSF anti-MBP levels over a period of one month. Administration of MBP synthetic peptides to ***MS*** patients either intrathecally or i.v. did not have any adverse neurol. effects and systemic complications did not occur. The MBP epitope for ***MS*** anti-MBP has been localized to an area between Pro85 and Pro96.
IN Warren, Kenneth G.; Catz, Ingrid
TI Myelin basic protein peptides for treatment of multiple ***sclerosis*** patients
PI WO 9612731 A1 ***19960502***

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9612731	A1	19960502	WO 1995-CA583	19951020 <--
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT				
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2203018	AA	19960502	CA 1995-2203018	19951020 <--
AU 9536478	A1	19960515	AU 1995-36478	19951020 <--
AU 713546	B2	19991202		
EP 789709	A1	19970820	EP 1995-934017	19951020 <--
EP 789709	B1	20010523		

R: AT, BE, CH, DE, [redacted] ES, FR, GB, IE, IT, LI, LU, N[redacted] SE

HU 76977	A2	1[redacted]80128	HU 1997-1679	19[redacted]1020	<--
HU 217633	B	20000328			
RU 2157815	C2	20001020	RU 1997-107853	19951020	<--
ES 2159322	T3	20011001	ES 1995-934017	19951020	
RO 117096	B1	20011030	RO 1997-769	19951020	
PL 182508	B1	20020131	PL 1995-319835	19951020	
FI 9701662	A	19970617	FI 1997-1662	19970418	<--
NO 9701829	A	19970623	NO 1997-1829	19970421	<--

AB . . . neutralizing or modulating prodn. of anti-myelin basic protein antibodies, are claimed. These peptides may be used in treatment of multiplex ***sclerosis*** . Human myelin basic protein (h-MBP) has a mol. wt. of 18.5 KD and contains 170 amino acid residues. Synthetic peptides. . . decline of F and B CSF anti-MBP levels over a period of one month. Administration of MBP synthetic peptides to ***MS*** patients either intrathecally or i.v. did not have any adverse neurol. effects and systemic complications did not occur. The MBP epitope for ***MS*** anti-MBP has been localized to an area between Pro85 and Pro96.

ST myelin basic protein peptide multiple ***sclerosis***

IT Multiple ***sclerosis***
(treatment of; myelin basic protein peptides for treatment of multiple ***sclerosis*** patients)

IT Phospholipoproteins
RL: MSC (Miscellaneous)
(MBP (myelin basic protein), myelin basic protein peptides for treatment of multiple ***sclerosis*** patients)

IT ***124364-89-2*** , Phospholipoprotein MBP (human 18.5-kilodalton isoform C-8 deblocked protein moiety)
RL: MSC (Miscellaneous)
(myelin basic protein peptides for treatment of multiple ***sclerosis*** patients)

IT 155029-61-1 160219-22-7 160219-24-9 171205-21-3 178273-97-7D, derivs. 178273-98-8 178273-99-9 178274-00-5
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(myelin basic protein peptides for treatment of multiple ***sclerosis*** patients)

L4 ANSWER 13 OF 15 CAPLUS COPYRIGHT 2002 ACS

PY ***1995***

TI Fine specificity of the antibody response to myelin basic protein in the central nervous system in multiple ***sclerosis*** : the minimal B-cell epitope and a model of its features

SO Proceedings of the National Academy of Sciences of the United States of America (***1995***), 92(24), 11061-5
CODEN: PNASA6; ISSN: 0027-8424

AB T cells, B cells, and antibody are found in the white matter of the central nervous system in multiple ***sclerosis*** . The epitope center for the antibody response to human myelin basic protein (MBP) fits precisely the minimal epitope Pro85-Val-Val-His-Phe-Phe-Lys-Asn-Ile-Val-Thr-Pro96 for that reported for HLA DR2b (DRB1*1501)-restricted T cells that recognize MBP and overlaps with the reported DR2a-restricted epitope for T cells reactive to MBP. The authors describe a mol. model of this epitope.

AU Warren, K. G.; Catz, Ingrid; Steinman, Lawrence

TI Fine specificity of the antibody response to myelin basic protein in the central nervous system in multiple ***sclerosis*** : the minimal B-cell epitope and a model of its features

SO Proceedings of the National Academy of Sciences of the United States of America (***1995***), 92(24), 11061-5
CODEN: PNASA6; ISSN: 0027-8424

AB T cells, B cells, and antibody are found in the white matter of the central nervous system in multiple ***sclerosis*** . The epitope center for the antibody response to human myelin basic protein (MBP) fits precisely the minimal epitope Pro85-Val-Val-His-Phe-Phe-Lys-Asn-Ile-Val-Thr-Pro96 for. . .

ST antibody myelin basic protein multiple ***sclerosis*** ; epitope MBP protein multiple ***sclerosis***

IT Multiple ***sclerosis***
(fine epitope specificity of autoantibody to myelin basic protein from humans with)

IT Brain
Cerebrospinal fluid
(fine epitope specificity of autoantibody to myelin basic protein from humans with multiple ***sclerosis***)

IT Phospholipoproteins
RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); PRP (Properties); BIOL (Biological study)
(MBP (myelin basic protein), fine epitope specificity of anti-MBP autoantibody from humans with multiple ***sclerosis***)

IT Antibodies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(auto-, fine epitope specificity of autoantibody to myelin basic protein from humans with multiple ***sclerosis***)

IT 102623-11-0 ***124364-89-2*** , Phospholipoprotein MBP (human 18.5-kilodalton isoform C-8 deblocked protein moiety) 171205-20-2 171205-21-3
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(fine epitope specificity of autoantibody to myelin basic protein from humans with multiple ***sclerosis***)

L4 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2002 ACS

PY ***1995***

TI Purification of immunologically active recombinant 21.5 kDa isoform of human myelin basic protein

SO Molecular Immunology (***1995***), 32(14/15), 1131-41
CODEN: MOIMD5; ISSN: 0161-5890

AB We have designed and expressed in bacteria a recombinant fetal form of human myelin basic protein (21.5 kDa isoform;rhMBP21.5), a candidate autoantigen in multiple ***sclerosis*** . An exon 2 insertion, carboxy-terminal histidine tag and preferred bacterial codons differentiate the MBP21.5 gene from the endcoding the adult, brain-derived form of human MBP (18.5 kDa isoform;hMBP18.5). MBPs were expressed at high levels in E. coli and extd. from whole cells by simultaneous acid solubilization and mech. disruption. A nearly two-fold increase in recombinant protein was detected in strains harboring MBP genes with bacterial preferred codons compared to genes contg. human codons. The recombinant mols. were purified in two steps, first by reversed-phase chromatog. sepn. and then by metal affinity chromatog. Dimeric forms of recombinant MBP21.5 were detected under physiol. conditions, however, substitution of a serine for the single cysteine at amino acid residue 81 resulted in only monomer formation. All forms of recombinant MBPs induced proliferative responses of human T lymphocytes specific for epitopes in MBO18.5 kDa. In contrast, human T cell lines that recognize an exon 2-encoded epitope of MBP responded to the 21.5 kDa isoform of MBP, but not the 18.5 kDa isoform.

AU Nye, Steven H.; Pelfrey, Clara M.; Burkwit, Jeffrey J.; Voskuhl, Rhonda R.; Lenardo, Michael J.; Mueller, John P.

SO Molecular Immunology (***1995***), 32(14/15), 1131-41
CODEN: MOIMD5; ISSN: 0161-5890

AB . . . expressed in bacteria a recombinant fetal form of human myelin basic protein (21.5 kDa isoform;rhMBP21.5), a candidate autoantigen in multiple ***sclerosis*** . An exon 2 insertion, carboxy-terminal histidine tag and preferred bacterial codons differentiate the MBP21.5 gene from the endcoding the adult,. . .

ST human gene MBP215 sequence multiple ***sclerosis*** ; autoantigen myelin basic protein human MBP215; phospholipoprotein MBP human autoantigen sequence isoform

IT Multiple ***sclerosis***
(MBP (myelin basic protein) candidate for autoantigen of; purifn. of immunol. active recombinant 21.5 kDa isoform of human myelin basic protein as candidate autoantigen in multiple ***sclerosis***)

IT Gene, animal
RL: PRP (Properties)
(MBP21.5, for MBP (myelin basic protein); purifn. of immunol. active recombinant 21.5 kDa isoform of human myelin basic protein as candidate autoantigen in multiple ***sclerosis***)

IT Protein sequences
(purifn. of immunol. active recombinant 21.5 kDa isoform of human myelin basic protein as candidate autoantigen in multiple ***sclerosis***)

IT Phospholipoproteins
RL: PRP (Properties); PUR (Purification or recovery); PREP (Preparation)
(MBP (myelin basic protein), purifn. of immunol. active recombinant 21.5 kDa isoform of human myelin basic protein as candidate autoantigen in multiple ***sclerosis***)

IT Lymphocyte
(T-cell, MBP epitopes recognized by; purifn. of immunol. active recombinant 21.5 kDa isoform of human myelin basic protein as candidate autoantigen in multiple ***sclerosis***)

IT Antigens

RL: PRP (Properties); PUR (Purification or recovery); PREP (Preparation)
(auto-, MBP (myelin basic protein) candidate for; purifn. of immunol.
active recombinant 21.5 kDa isoform of human myelin basic protein as
candidate autoantigen in multiple ***sclerosis***)

IT Deoxyribonucleic acid sequences
(complementary, purifn. of immunol. active recombinant 21.5 kDa isoform
of human myelin basic protein as candidate autoantigen in multiple
sclerosis)

IT ***11084-77-8***
RL: PRP (Properties)
(amino acid sequence; purifn. of immunol. active recombinant 21.5 kDa
isoform of human myelin basic protein as candidate autoantigen in
multiple ***sclerosis***)

IT ***173148-38-4P***
RL: PRP (Properties); PUR (Purification or recovery); PREP (Preparation)
(amino acid sequence; purifn. of immunol. active recombinant 21.5 kDa
isoform of human myelin basic protein as candidate autoantigen in
multiple ***sclerosis***)

IT 140032-33-3, Genbank M13577 172711-99-8, Genbank L41657
RL: PRP (Properties)
(nucleotide sequence; purifn. of immunol. active recombinant 21.5 kDa
isoform of human myelin basic protein as candidate autoantigen in
multiple ***sclerosis***)

L4 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2002 ACS
PY ***1993***
TI The human myelin basic protein gene is included within a 179-kilobase
transcription unit: Expression in the immune and central nervous systems
SO Proceedings of the National Academy of Sciences of the United States of
America (***1993***), 90(22), 10695-9
CODEN: PNASA6; ISSN: 0027-8424
AB Two human Golli (for gene expressed in the oligodendrocyte lineage)-MBP
(for myelin basic protein) cDNAs have been isolated from a human
oligodendroglioma cell line. Anal. of these cDNAs has enabled the authors
to det. the entire structure of the human Golli-MBP gene. The Golli-MBP
gene, which encompasses the MBP transcription unit, is .apprxeq.179 kb in
length and consists of 10 exons, seven of which constitute the MBP gene.
The human Golli-MBP gene contains two transcription start sites, each of
which gives rise to a family of alternatively spliced transcripts. At
least two Golli-MBP transcripts, contg. the first three exons of the gene
and one or more MBP exons, are produced from the first transcription start
site. The second family of transcripts contains only MBP exons and
produces the well-known MBPs. In humans, RNA blot anal. revealed that
Golli-MBP transcripts were expressed in fetal thymus, spleen, and human
B-cell and macrophage cell lines, as well as in fetal spinal cord. These
findings clearly link the expression of exons encoding the
autoimmunogen/encephalitogen MBP in the central nervous system to cells
and tissues of the immune system through normal expression of the
Golli-MBP gene. They also establish that this genetic locus, which
includes the MBP gene, is conserved among species, providing further
evidence that the MBP transcription unit is an integral part of the Golli
transcription unit and suggest that this structural arrangement is
important for the genetic function and/or regulation of these genes.
AU Pribyl, T. M.; Campagnoni, C. W.; Kampf, K.; Kashima, T.; Handley, V. W.;
McMahon, J.; Campagnoni, A. T.
SO Proceedings of the National Academy of Sciences of the United States of
America (***1993***), 90(22), 10695-9
CODEN: PNASA6; ISSN: 0027-8424
IT Encephalomyelitis
Multiple ***sclerosis***
(myelin basic protein gene expression in immune and central nervous
systems in human in relation to)
IT 152926-27-7 ***152926-28-8***
RL: PRP (Properties)
(amino acid sequence and expression in immune and central nervous
systems of)

=> FIL REGISTRY

	SINCE FILE ENTRY	TOTAL SESSION
COST IN U.S. DOLLARS		
FULL ESTIMATED COST	88.14	147.32
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-9.29	-9.29

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DICTIONARY FILE UPDATES:  19 SEP 2002  HIGHEST RN 453507-55-6

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available.  See HELP
PROPERTIES for more information.  See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> s hhpartahtgslpql/sqep
            0 HHPARTAHTGSLPQL/SQEP
        76163 SQL=15
L5          0 HHPARTAHTGSLPQL/SQEP
                (HHPARTAHTGSLPQL/SQEP AND SQL=15)

=> s hhpartahtgslpqk/sqep
            0 HHPARTAHTGSLPQK/SQEP
        76163 SQL=15
L6          0 HHPARTAHTGSLPQK/SQEP
                (HHPARTAHTGSLPQK/SQEP AND SQL=15)

=> s artahtgslpqkshg/sqep
            0 ARTAHTGSLPQKSHG/SQEP
        76163 SQL=15
L7          0 ARTAHTGSLPQKSHG/SQEP
                (ARTAHTGSLPQKSHG/SQEP AND SQL=15)

=> s tgslpqkshgrtqde/sqep
            0 TGSLPQKSHGRTQDE/SQEP
        76163 SQL=15
L8          0 TGSLPQKSHGRTQDE/SQEP
                (TGSLPQKSHGRTQDE/SQEP AND SQL=15)

=> s kshgrtqdenpvvhffkn/sqep
            0 KSHGRTQDENPVVHFFKN/SQEP
        67688 SQL=18
L9          0 KSHGRTQDENPVVHFFKN/SQEP
                (KSHGRTQDENPVVHFFKN/SQEP AND SQL=18)

=> s kshgrtqdenpvvhffknivt/sqep
            1 KSHGRTQDENPVVHFFKNIVT/SQEP
        77311 SQL=21
L10         1 KSHGRTQDENPVVHFFKNIVT/SQEP
                (KSHGRTQDENPVVHFFKNIVT/SQEP AND SQL=21)

=> s tqdenpvvhffknivttpr/sqep
            0 TQDENPVVHFFKNIVTTPR/SQEP
        50602 SQL=19
L11         0 TQDENPVVHFFKNIVTTPR/SQEP
                (TQDENPVVHFFKNIVTTPR/SQEP AND SQL=19)

=> s tqdenpvvhffknivtpr/sqep
            1 TQDENPVVHFFKNIVTPR/SQEP
        67688 SQL=18
L12         1 TQDENPVVHFFKNIVTPR/SQEP
                (TQDENPVVHFFKNIVTPR/SQEP AND SQL=18)

=> s knivtprtpppsqgkg/sqep
            1 KNIVTPRTPPPSQGKG/SQEP
        31826 SQL=16
L13         1 KNIVTPRTPPPSQGKG/SQEP
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                (KNIVTPRTPPP[redacted]GKG/SQEP AND SQL=16)

=> s npvvhffkni/sqep
             2 NPVVHFFKNI/SQEP
         89354 SQL=10
L14          2 NPVVHFFKNI/SQEP
               (NPVVHFFKNI/SQEP AND SQL=10)

=> s pvvhffkniv/sqep
             1 PVVHFFKNIV/SQEP
         89354 SQL=10
L15          1 PVVHFFKNIV/SQEP
               (PVVHFFKNIV/SQEP AND SQL=10)

=> s vvhffknivt/sqep
             1 VVHFFKNIVT/SQEP
         89354 SQL=10
L16          1 VVHFFKNIVT/SQEP
               (VVHFFKNIVT/SQEP AND SQL=10)

=> s vhffknivtp/sqep
             2 VHFFKNIVTP/SQEP
         89354 SQL=10
L17          2 VHFFKNIVTP/SQEP
               (VHFFKNIVTP/SQEP AND SQL=10)

=> d hist

     (FILE 'HOME' ENTERED AT 16:23:09 ON 20 SEP 2002)

     FILE 'REGISTRY, DGENE' ENTERED AT 16:24:05 ON 20 SEP 2002

     FILE 'REGISTRY, DGENE' ENTERED AT 16:24:16 ON 20 SEP 2002

     FILE 'REGISTRY' ENTERED AT 16:28:10 ON 20 SEP 2002
L1            22 S HHPARTAHYGSLPQKSHGRTQDENPVVHFFKNIVTPRTPPPSQGKG/SQSP

     FILE 'BIOSIS, MEDLINE, CAPLUS, EMBASE, SCISEARCH' ENTERED AT 16:28:37 ON
     20 SEP 2002
L2            18 S L1 AND (SCLEROSIS OR MS)
L3            15 S L2 AND PD<=20010320
L4            15 DUP REM L3 (0 DUPLICATES REMOVED)

     FILE 'REGISTRY' ENTERED AT 16:55:46 ON 20 SEP 2002
L5             0 S HHPARTAHTGSLPQL/SQEP
L6             0 S HHPARTAHTGSLPQK/SQEP
L7             0 S ARTAHTGSLPQKSHG/SQEP
L8             0 S TGSLPQKSHGRTQDE/SQEP
L9             0 S KSHGRTQDENPVVHFFKN/SQEP
L10            1 S KSHGRTQDENPVVHFFKNIVT/SQEP
L11            0 S TQDENPVVHFFKNIVTTPR/SQEP
L12            1 S TQDENPVVHFFKNIVTPR/SQEP
L13            1 S KNIVTPRTPPPSQGKG/SQEP
L14            2 S NPVVHFFKNI/SQEP
L15            1 S PVVHFFKNIV/SQEP
L16            1 S VVHFFKNIVT/SQEP
L17            2 S VHFFKNIVTP/SQEP

=> d l10

L10  ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2002 ACS
RN   178273-99-9  REGISTRY
CN   L-Threonine, L-lysyl-L-seryl-L-histidylglycyl-L-arginyl-L-threonyl-L-
     glutaminyl-L-.alpha.-asparty1-L-.alpha.-glutamyl-L-asparaginyl-L-prolyl-L-
     valyl-L-valyl-L-histidyl-L-phenylalanyl-L-phenylalanyl-L-lysyl-L-
     asparaginyl-L-isoleucyl-L-valyl- (9CI)  (CA INDEX NAME)
OTHER NAMES:
CN   1: PN: US6252040 PAGE: 3/4 claimed sequence
FS   PROTEIN SEQUENCE; STEREOSEARCH
MF   C109 H169 N33 O32
SR   CA
LC   STN Files:   CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

/ Structure 1 in file .gra /
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/ structure 2 in file .gra /

/ structure 3 in file .gra /

/ structure 4 in file .gra /

/ structure 5 in file .gra /

3 REFERENCES IN FILE CA (1962 TO DATE)
3 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> d hist

(FILE 'HOME' ENTERED AT 16:23:09 ON 20 SEP 2002)

FILE 'REGISTRY, DGENE' ENTERED AT 16:24:05 ON 20 SEP 2002

FILE 'REGISTRY, DGENE' ENTERED AT 16:24:16 ON 20 SEP 2002

FILE 'REGISTRY' ENTERED AT 16:28:10 ON 20 SEP 2002
L1 22 S HHPARTAHYGSLPQKSHGRTQDENPVVHFFKNIVTPRTPPPSQGKG/SQSP

FILE 'BIOSIS, MEDLINE, CAPLUS, EMBASE, SCISEARCH' ENTERED AT 16:28:37 ON 20 SEP 2002
L2 18 S L1 AND (SCLEROSIS OR MS)
L3 15 S L2 AND PD<=20010320
L4 15 DUP REM L3 (0 DUPLICATES REMOVED)

FILE 'REGISTRY' ENTERED AT 16:55:46 ON 20 SEP 2002
L5 0 S HHPARTAHTGSLPQL/SQEP
L6 0 S HHPARTAHTGSLPQK/SQEP
L7 0 S ARTAHTGSLPQKSHG/SQEP
L8 0 S TGSLPQKSHGRTQDE/SQEP
L9 0 S KSHGRTQDENPVVHFFKN/SQEP
L10 1 S KSHGRTQDENPVVHFFKNIVT/SQEP
L11 0 S TQDENPVVHFFKNIVTTPR/SQEP
L12 1 S TQDENPVVHFFKNIVTPR/SQEP
L13 1 S KNIVTPRTPPPSQGKG/SQEP
L14 2 S NPVVHFFKNI/SQEP
L15 1 S PVVHFFKNIV/SQEP
L16 1 S VVHFFKNIVT/SQEP
L17 2 S VHFFKNIVTP/SQEP

=> FIL BIOSIS MEDLINE CAPLUS EMBASE SCISEARCH

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FILE 'SCISEARCH' ENTERED AT 17:07:58 ON 20 SEP 2002

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=> s (l10 or l12 or l13 or l14 or l15 or l16 or l17) and (sclerosis or ms)
'SQEP' IS NOT A VALID FIELD CODE
L18 8 (L10 OR L12 OR L13 OR L14 OR L15 OR L16 OR L17) AND (SCLEROSIS OR MS)

=> dup rem l18
PROCESSING COMPLETED FOR L18
L19 8 DUP REM L18 (0 DUPLICATES REMOVED)

=> s l18 and pd<=20010320
1 FILES SEARCHED...
'20010320' NOT A VALID FIELD CODE
4 FILES SEARCHED...
L20 8 L18 AND PD<=20010320

=> d l8 ti so ab au
L8 HAS NO ANSWERS
L8 0 SEA FILE=REGISTRY ABB=ON PLU=ON TGSLPQKSHGRTQDE/SQEP

=> d l18 1-8 ti so ab au

L18 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2002 ACS
TI Peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple ***sclerosis*** patients
SO U.S., 41 pp., Cont.-in-part of U.S. Ser. No. 7,520.
CODEN: USXXAM
AB Human myelin basic protein (h-MBP) has a mol. wt. of 18.5 KD and contains 170 amino acid residues. Synthetic peptides ranging in length from about 8 to 25 residues and covering the entire length of the protein have been produced. Antibodies to h-MBP (anti-MBP) were found to be neutralized by the synthetic peptides, in vitro, which span the h-MBP from about amino acid residue 61 to about amino acid residue 106. The peptides, which cover both the amino (about residues 1 to 63) and carboxy (about residues 117 to 162) terminals of h-MBP did not neutralize purified anti-MBP. Intrathecal administration of peptide MBP(75-95), MBP(86-95), or MBP(82-98) produced complete binding-neutralization of free (F) anti-MBP with no change in bound (B) levels. A control peptide MBP35-58 had no effect on F or B anti-MBP levels. I.v. administration of MBP(75-95), MBP(86-95), or MBP(82-98) resulted in significant decline of F and B CSF anti-MBP levels. Administration of MBP synthetic peptides to ***MS*** patients either intrathecally or i.v. did not have any adverse neurol. effects and systemic complications did not occur. The MBP epitope for ***MS*** anti-MBP has been localized to an area between amino acid 86 and amino acid 95.
IN Warren, Kenneth G.; Catz, Ingrid

L18 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2002 ACS
TI Peptide fragments of myelin basic protein in the treatment of multiple ***sclerosis***
SO PCT Int. Appl., 75 pp.
CODEN: PIXXD2
AB Human myelin basic protein (h-MBP) has a mol. wt. of 18.5 kDa and contains 170 amino acid residues. Synthetic peptides ranging in length from about 8 to 25 residues and covering the entire length of the protein have been produced. Antibodies to h-MBP (anti-MBP) were neutralized by the synthetic peptides, in vitro, which span the h-MBP from about amino acid residue 61 to about amino acid residue 106. The peptides, which cover both the amino (about residues 1 to 63) and carboxy (about residues 117 to 162) terminals of h-MBP did not neutralize purified anti-MBP. Intrathecal administration of peptide MBP(75-95), MBP(86-95), or MBP(82-98) produced complete binding-neutralization of free (F) anti-MBP with no change in bound (B) levels. A control peptide MBP35-58 had no effect on (F) or (B) anti-MBP levels. The i.v. administration of MBP(75-95), MBP(86-95), or MBP(82-98) resulted in significant decline of (F) and (B) CSF anti-MBP levels. Administration of MBP synthetic peptides to ***MS*** patients either intrathecally or i.v. did not have any adverse neurol. effects and systemic complications did not occur. The MBP epitope for ***MS*** anti-MBP was localized to an area between Pro86 and Pro95.
IN Warren, Kenneth G.; Catz, Ingrid

L18 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2002 ACS
TI Short peptide-based tolerogens without self-antigenic or pathogenic

activity reverse autoimmune disease
SO Journal of Immunology (1998), 160(10), 5188-5194
CODEN: JOIMA3; ISSN: 0022-1767
AB An immunodominant epitope of myelin basic protein (MBP), VHFFKNIVTPRTP (p87-99), is a major target of T cells in brain lesions of multiple ***sclerosis*** (***MS***), and this peptide can trigger exptl. autoimmune encephalomyelitis (EAE). The authors designed truncated peptides based on this pathogenic 13-mer that are not antigenic. These short peptides reduced prodn. of IFN-.gamma. and TNF-.alpha. in vivo. Moreover, paraplegic rats given the 7-mer FKNIVTP in sol. form showed total reversal of paralysis in 24 h. Truncated peptides that are too small to stimulate antigenic responses to pathogenic regions of myelin basic protein are nevertheless effective tolerogens and are able to anergize autoreactive T cells. Short peptide-based tolerogens, devoid of immunogenic and pathogenic potential, may be attractive for therapy of autoimmune diseases.
AU Karin, Nathan; Binah, Ofer; Grabie, Nir; Mitchell, Dennis J.; Felzen, Bella; Solomon, Matthew D.; Conlon, Paul; Gaur, Amitabh; Ling, Nicholas; Steinman, Lawrence

L18 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2002 ACS
TI Myelin basic protein peptides for treatment of multiple ***sclerosis*** patients
SO PCT Int. Appl., 52 pp.
CODEN: PIXXD2
AB Peptides R1-Val-His-Phe-Phe-Lys-Asn-Ile-R2 (R1,R2=H, OH, amino acid, peptide; R1.noteq.R2=H,OH) derived from myelin basic protein, which are capable of neutralizing or modulating prodn. of anti-myelin basic protein antibodies, are claimed. These peptides may be used in treatment of multiplex ***sclerosis*** . Human myelin basic protein (h-MBP) has a mol. wt. of 18.5 KD and contains 170 amino acid residues. Synthetic peptides ranging in length from about 8 to 25 residues and covering the entire length of the protein have been produced. Antibodies to h-MBP (anti-MBP) were found to be neutralized by the synthetic peptides, in vitro, which span the h-MBP from about amino acid residue 61 to about amino acid residue 106. The peptides, which cover both the amino (about residues 1 to 63) and carboxy (about residues 117 to 162) terminals of h-MBP did not neutralize purified anti-MBP. Intrathecal administration of peptide MBP75-95, either as a single dose, or as repeated injections for periods up to 10 wk, produced complete binding-neutralization of free (F) anti-MBP with no change in bound (B) levels. A control peptide MBP35-58 had no effect on F or B anti-MBP levels. I.v. administration of MBP75-95 resulted in significant decline of F and B CSF anti-MBP levels over a period of one month. Administration of MBP synthetic peptides to ***MS*** patients either intrathecally or i.v. did not have any adverse neurol. effects and systemic complications did not occur. The MBP epitope for ***MS*** anti-MBP has been localized to an area between Pro85 and Pro96.
IN Warren, Kenneth G.; Catz, Ingrid

L18 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2002 ACS
TI Fine specificity of the antibody response to myelin basic protein in the central nervous system in multiple ***sclerosis*** : the minimal B-cell epitope and a model of its features
SO Proceedings of the National Academy of Sciences of the United States of America (1995), 92(24), 11061-5
CODEN: PNASA6; ISSN: 0027-8424
AB T cells, B cells, and antibody are found in the white matter of the central nervous system in multiple ***sclerosis*** . The epitope center for the antibody response to human myelin basic protein (MBP) fits precisely the minimal epitope Pro85-Val-Val-His-Phe-Phe-Lys-Asn-Ile-Val-Thr-Pro96 for that reported for HLA DR2b (DRB1*1501)-restricted T cells that recognize MBP and overlaps with the reported DR2a-restricted epitope for T cells reactive to MBP. The authors describe a mol. model of this epitope.
AU Warren, K. G.; Catz, Ingrid; Steinman, Lawrence

L18 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2002 ACS
TI Increased synthetic peptide specificity of tissue-CSF bound anti-MBP in multiple ***sclerosis***
SO Journal of Neuroimmunology (1993), 43(1-2), 87-96
CODEN: JNRIDW; ISSN: 0165-5728
AB Free and bound hydrosol. protein exts. were prepd. from 4 anatomical areas of a multiple ***sclerosis*** (***MS***) cerebrum and from corresponding anatomical areas of a normal (non- ***MS***) control. Increased levels of IgG and anti-myelin basic protein antibodies

(anti-MBP) were detected in all ***MS*** samples and [illegible]y were undetectable in the cont[illegible]s. IgG and anti-MBP from free [illegible]nbound) hydrosol. protein exts. are defined as free IgG and free anti-MBP, while IgG and anti-MBP from tissue bound protein exts. are defined as bound IgG and bound anti-MBP. IgG was purified from free protein exts. by protein G Sepharose affinity chromatog. and anti-MBP was further isolated from purified IgG by antigen specific (MBP) Sepharose affinity chromatog. Free and bound anti-MBP were reacted with 20 synthetic peptides of human MBP prepd. by the Fmoc method. Free anti-MBP, whether in the context of whole protein exts., or as purified IgG or as purified antibody, was completely neutralized by peptides #12, #15, #56, and #56* contg. overall residues 75-106, partially neutralized by peptides #27, #16, and #21 contg. overall residues 61-83, and did not react with the remaining 13 peptides. Tissue bound anti-MBP was completely neutralized only by peptides #12, #15, #56, and #56* (overall residues 75-106) and showed no reactivity towards the remaining 16 peptides, including peptides #27, #16, and #21. Synthetic peptide specificity of free anti-MBP purified from ***MS*** cerebrum was identical to previously reported specificity of free anti-MBP from ***MS*** cerebrospinal fluid (CSF), while tissue bound anti-MBP, as well as bound anti-MBP from CSF, had a more restricted synthetic peptide specificity than free anti-MBP. Thus, the most likely epitope of anti-MBP is located between residues 84 and 95 of human MBP just proximal to the tri-proline sequence (99-101).

AU Warren, Kenneth G.; Catz, Ingrid

L18 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2002 ACS

TI Synthetic peptide specificity of anti-myelin basic protein from multiple ***sclerosis*** cerebrospinal fluid

SO PCT Int. Appl., 25 pp.
CODEN: PIXXD2

AB Human myelin basic protein (hMBP) has a mol. wt. of 18.5 kDa and contains 170 amino acid residues. Synthetic peptides of 8-25 residues and covering the entire length of the protein have been produced. Anti-hMBP antibodies (isolated from cerebrospinal fluid from multiple ***sclerosis*** patients) were neutralized by peptides spanning the hMBP region of approx. residue 61 to approx. residue 106. Peptides representing amino- (approx. residues 1-63) and carboxyl-terminal (approx. residues 117-162) regions of hMBP did not neutralize the purified anti-hMBP antibodies. Intrathecal administration of selected synthetic MBP peptides may be used as a treatment for multiple ***sclerosis*** by neutralizing the anti-MBP antibodies. Amino acid sequences of reactive peptides are included.

IN Warren, Kenneth G.; Catz, Ingrid

L18 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2002 ACS

TI Synthetic peptide specificity of anti-myelin basic protein from multiple ***sclerosis*** cerebrospinal fluid

SO J. Neuroimmunol. (1992), 39(1-2), 81-9
CODEN: JNRIDW; ISSN: 0165-5728

AB Human myelin basic protein (h-MBP) purified from central nervous system (CNS) myelin has a mol. mass of 18.5 kDa and 170 residues. Eighteen synthetic peptides ranging from 8 to 25 residues and covering the length of h-MBP were prepd. by the Fmoc method. Antibodies to h-MBP (anti-MBP) were isolated and purified from cerebrospinal fluid (CSF) of patients with multiple ***sclerosis*** (***MS***) by two-step affinity chromatog. Purified anti-MBP was reacted with increasing amts. of h-MBP as well as each of the 18 synthetic peptides in an initial liq. phase assay, and then titers of free anti-MBP in the resulting mixts. were detd. by a solid phase RIA. Purified anti-MBP was neutralized by h-MBP and 6 of the 18 synthetic peptides used in this study. The antibody was completely neutralized by peptides No. 12 (residues: 80-97), No. 15 (residues: 91-106) and No. 56 (residues: 75-95) and was partially neutralized by peptides No. 27 (residues: 61-75), No. 16 (residues: 64-78) and No. 21 (residues: 69-83). The 12 remaining synthetic peptides covering both the N- (residues 1-63) and C- (residues 117-162) terminals of h-MBP did not neutralize purified anti-MBP. These results suggest that anti-MBP purified from CSF of patients with ***MS*** have affinity for discontinuous epitopes located between residues 61 and 106 on the h-MBP mol. Alternatively anti-MBP may be polyspecific recognizing different amino acid sequences.

AU Warren, Kenneth G.; Catz, Ingrid

=> d hist

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     20 SEP 2002
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L3             15 S L2 AND PD<=20010320
L4             15 DUP REM L3 (0 DUPLICATES REMOVED)

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L6              0 S HHPARTAHTGSLPQK/SQEP
L7              0 S ARTAHTGSLPQKSHG/SQEP
L8              0 S TGSLPQKSHGRTQDE/SQEP
L9              0 S KSHGRTQDENPVVHFFKN/SQEP
L10             1 S KSHGRTQDENPVVHFFKNIVT/SQEP
L11             0 S TQDENPVVHFFKNIVTTPR/SQEP
L12             1 S TQDENPVVHFFKNIVTPR/SQEP
L13             1 S KNIVTPRTPPPSQGKG/SQEP
L14             2 S NPVVHFFKNI/SQEP
L15             1 S PVVHFFKNIV/SQEP
L16             1 S VVHFFKNIVT/SQEP
L17             2 S VHFFKNIVTP/SQEP

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     20 SEP 2002
L18             8 S (L10 OR L12 OR L13 OR L14 OR L15 OR L16 OR L17) AND (SCLEROSI
L19             8 DUP REM L18 (0 DUPLICATES REMOVED)
L20             8 S L18 AND PD<=20010320

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09921880

=> FIL REGISTRY

=> s hhpartahygslpqkshgrtqdenpvvhffknivtprtpppsqgkg/sqsp
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=> FIL BIOSIS MEDLINE CAPLUS EMBASE SCISEARCH

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	26.88	59.18

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=> s l1 and (sclerosis or MS)
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L2 18 L1 AND (SCLEROSIS OR MS)

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'20010320' NOT A VALID FIELD CODE
4 FILES SEARCHED...
L3 15 L2 AND PD<=20010320

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L4 ANSWER 1 OF 15 CAPLUS COPYRIGHT 2002 ACS
PY 2002
1991
1996
1996
1997
TI Human myelin basic protein epitopes for modulating immune system and for treating multiple **sclerosis**
SO U.S. Pat. Appl. Publ., 21 pp., Cont.-in-part of U.S. Ser. No. 125,407, abandoned.
CODEN: USXXCO
AB Methods for modulating the immune system of an animal, as well as tolerating such an immune system through the administration of one or more polypeptides derived from human myelin basic protein (hMBP), are provided.

Such polypeptides include residues 87-99 of hMBP, as well as residues His-Phe-Phe-Lys and/or Lys-Ile-Phe-Lys of hMBP. The method is esp. useful for treating multiple **sclerosis**.

IN Steinman, Lawrence; Zamvil, Scott

TI Human myelin basic protein epitopes for modulating immune system and for treating multiple **sclerosis**

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2002076412	A1	20020620	US 1995-484409	19950607
WO 9117268	A1	19911114	WO 1991-US2991	19910501 <--
W: AU, CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
EP 725277	A2	19960807	EP 1996-100852	19910501 <--
EP 725277	A3	19961204		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
US 5667967	A	19970916	US 1993-66325	19930521 <--

AB . . . 87-99 of hMBP, as well as residues His-Phe-Phe-Lys and/or Lys-Ile-Phe-Lys of hMBP. The method is esp. useful for treating multiple **sclerosis**.

ST immunomodulator immune tolerance myelin basic protein; human myelin basic protein epitope multiple **sclerosis**

IT Structure-activity relationship
(antigen-binding; human myelin basic protein epitopes for modulating immune system and for treating multiple **sclerosis**)

IT Drug delivery systems
(carriers; human myelin basic protein epitopes for modulating immune system and for treating multiple **sclerosis**)

IT DNA sequences
Epitopes
Human
Immunomodulators
Multiple **sclerosis**
Protein sequences
(human myelin basic protein epitopes for modulating immune system and for treating multiple **sclerosis**)

IT Myelin basic protein
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(human myelin basic protein epitopes for modulating immune system and for treating multiple **sclerosis**)

IT Immune tolerance
(inducer; human myelin basic protein epitopes for modulating immune system and for treating multiple **sclerosis**)

IT **438070-01-0**, Myelin basic protein (human precursor)
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amino acid sequence; human myelin basic protein epitopes for modulating immune system and for treating multiple **sclerosis**)

IT 60998-20-1 115306-15-5 118506-26-6 124470-31-1 124470-32-2
158401-73-1 158401-74-2 163350-44-5 438002-44-9 438002-47-2
438002-49-4 438002-51-8 438002-53-0 438002-55-2 438002-57-4
438002-59-6 438002-63-2 438002-65-4 438002-66-5 438002-67-6
438002-68-7 438002-69-8 438002-71-2 438002-72-3 438002-73-4
438002-75-6 438002-77-8 438002-79-0 438002-83-6 438002-85-8
438002-87-0 438002-89-2 438002-91-6 438002-93-8 438002-95-0
438002-96-1 438002-97-2 438069-09-1 438069-10-4
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(human myelin basic protein epitopes for modulating immune system and for treating multiple **sclerosis**)

IT 438070-02-1, DNA (human myelin basic protein cDNA)

RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nucleotide sequence; human myelin basic protein epitopes for modulating immune system and for treating multiple **sclerosis**)

IT 158401-69-5 158401-70-8 158401-71-9 158401-72-0 158401-75-3
158401-76-4 158401-77-5 158401-78-6 158401-79-7 158401-80-0
158401-81-1
RL: PRP (Properties)
(unclaimed sequence; human myelin basic protein epitopes for modulating immune system and for treating multiple **sclerosis**)

L4 ANSWER 2 OF 15 CAPLUS COPYRIGHT 2002 ACS
PY 2002
1999
TI Nervous system-specific antigens and activated T cells for neuroprotection and neuronal degeneration inhibition
SO U.S. Pat. Appl. Publ., 93 pp., Cont.-in-part of U.S. Ser. No. 314,161.
CODEN: USXXCO
AB Compns. and methods to promote nerve regeneration or to confer neuroprotection and prevent or inhibit neuronal degeneration within the nervous system, either the central nervous system or the peripheral nervous system, are provided. Treatment involves administering NS-specific activated T cells, or an NS-specific antigen or analog thereof, a peptide derived therefrom or an analog or deriv. of said peptide, or a nucleotide sequence encoding said antigen or peptide, or any combination thereof. The NS-specific antigen is myelin basic protein, myelin oligodendrocyte glycoprotein, proteolipid, myelin-assocd. glycoprotein, S-100, .beta.-amyloid, Thy-1, P0, P2 or neurotransmitter receptor.
IN Eisenbach-Schwartz, Michal; Hauben, Ehud; Cohen, Irun R.; Beserman, Pierre; Mosonego, Alon; Moalem, Gila

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002072493	A1	20020613	US 2001-893348	20010628
WO 9934827	A1	19990715	WO 1998-US14715	19980721 <--

PI
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, HR, HU, ID, IL, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

IT Nervous system
(amyotrophic lateral **sclerosis**; nervous system-specific antigens and activated T cells for neuroprotection and neuronal degeneration inhibition)

IT **437135-40-5**, Myelin basic protein (human gene MBP) 437135-48-3, Proteolipid protein (human gene PLP) 437135-49-4 437135-54-1, Protein NogoA (Rattus norvegicus) 437135-55-2, Protein NogoB (Rattus norvegicus) 437135-56-3, Protein NogoC (Rattus norvegicus) 437135-57-4, Protein NogoA (human) 437135-58-5, Protein NogoB (human) 437135-59-6, Protein NogoC (human) 437135-60-9, Protein Nogo receptor (human) 437135-61-0, Protein Nogo receptor (Mus musculus)
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amino acid sequence; nervous system-specific antigens and activated T cells for neuroprotection and neuronal degeneration inhibition)

L4 ANSWER 3 OF 15 CAPLUS COPYRIGHT 2002 ACS
PY 2002
2001

09921880

2001
1999
2000

TI Methods for treatment of multiple **sclerosis** using peptide analogs of human myelin basic protein

SO U.S., 49 pp., Cont.-in-part of U.S. Ser. No. 137,759.
CODEN: USXXAM

AB The present invention is directed toward peptide analogs of human myelin basic protein. The peptide analog is at least seven amino acids long and derived from residues 83 to 99 of human myelin basic protein. The analogs are altered from the native sequence at least at positions 91, 95, or 97. Addnl. alterations may be made at other positions. Pharmaceutical compns. contg. these peptide analogs are provided. The peptide analogs are useful for treating multiple **sclerosis**.

IN Gaur, Amitabh; Conlon, Paul; Ling, Nicholas C.; Staehelin, Theophil; Crowe, Paul D.

TI Methods for treatment of multiple **sclerosis** using peptide analogs of human myelin basic protein

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 6379670	B1	20020430	US 1999-378244	19990819
US 6329499	B1	20011211	US 1994-342408	19941118
US 6251396	B1	20010626	US 1998-137759	19980820
AU 9936858	A1	19990826	AU 1999-36858	19990629 <--
AU 723254	B2	20000824		

AB . . . made at other positions. Pharmaceutical compns. contg. these peptide analogs are provided. The peptide analogs are useful for treating multiple **sclerosis**.

ST multiple **sclerosis** peptide analog myelin basic protein sequence therapy

IT Human
(T-cells of; treatment of multiple **sclerosis** using peptide analogs of human myelin basic protein)

IT T cell (lymphocyte)
(helper cell/inducer, TH2, immune response; treatment of multiple **sclerosis** using peptide analogs of human myelin basic protein)

IT Multiple **sclerosis**
Protein sequences
cDNA sequences
(treatment of multiple **sclerosis** using peptide analogs of human myelin basic protein)

IT Peptides, biological studies
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(treatment of multiple **sclerosis** using peptide analogs of human myelin basic protein)

IT Myelin basic protein
RL: PRP (Properties)
(treatment of multiple **sclerosis** using peptide analogs of human myelin basic protein)

IT 178823-49-9
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(treatment of multiple **sclerosis** using peptide analogs of human myelin basic protein)

IT 419018-12-5, 1: PN: US6379670 SEQID: 1 unclaimed DNA
RL: PRP (Properties)
(unclaimed nucleotide sequence; methods for treatment of multiple **sclerosis** using peptide analogs of human myelin basic protein)

IT **419018-13-6**
RL: PRP (Properties)

08/03/01

(unclaimed protein sequence; methods for treatment of multiple **sclerosis** using peptide analogs of human myelin basic protein)

IT 178823-45-5 419018-14-7 419018-15-8 419018-16-9 419018-17-0
RL: PRP (Properties)
(unclaimed sequence; methods for treatment of multiple **sclerosis** using peptide analogs of human myelin basic protein)

L4 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2002 ACS
PY 2001
1993
2001
2002
TI Peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple **sclerosis** patients
SO U.S., 41 pp., Cont.-in-part of U.S. Ser. No. 7,520.
CODEN: USXXAM
AB Human myelin basic protein (h-MBP) has a mol. wt. of 18.5 KD and contains 170 amino acid residues. Synthetic peptides ranging in length from about 8 to 25 residues and covering the entire length of the protein have been produced. Antibodies to h-MBP (anti-MBP) were found to be neutralized by the synthetic peptides, in vitro, which span the h-MBP from about amino acid residue 61 to about amino acid residue 106. The peptides, which cover both the amino (about residues 1 to 63) and carboxy (about residues 117 to 162) terminals of h-MBP did not neutralize purified anti-MBP. Intrathecal administration of peptide MBP(75-95), MBP(86-95), or MBP(82-98) produced complete binding-neutralization of free (F) anti-MBP with no change in bound (B) levels. A control peptide MBP35-58 had no effect on F or B anti-MBP levels. I.v. administration of MBP(75-95), MBP(86-95), or MBP(82-98) resulted in significant decline of F and B CSF anti-MBP levels. Administration of MBP synthetic peptides to **MS** patients either intrathecally or i.v. did not have any adverse neurol. effects and systemic complications did not occur. The MBP epitope for **MS** anti-MBP has been localized to an area between amino acid 86 and amino acid 95.
IN Warren, Kenneth G.; Catz, Ingrid
TI Peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple **sclerosis** patients

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6252040	B1	20010626	US 1998-55263	19980406
	CA 2053799	AA	19930423	CA 1991-2053799	19911022 <--
	US 6258781	B1	20010710	US 1998-7520	19980115
	US 2002111312	A1	20020815	US 2001-813383	20010320

AB . . . MBP(86-95), or MBP(82-98) resulted in significant decline of F and B CSF anti-MBP levels. Administration of MBP synthetic peptides to **MS** patients either intrathecally or i.v. did not have any adverse neurol. effects and systemic complications did not occur. The MBP epitope for **MS** anti-MBP has been localized to an area between amino acid 86 and amino acid 95.
ST multiple **sclerosis** peptide neutralizing antibody myelin basic protein
IT Myelin basic protein
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(autoantibodies to; peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple **sclerosis** patients)
IT Antibodies
RL: ADV (Adverse effect, including toxicity); BPR (Biological process);

BSU (Biological study, unclassified); REM (Removal or disposal); BIOL (Biological study); PROC (Process)
(autoantibodies, to myelin basic protein; peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple **sclerosis** patients)

IT Drug delivery systems
(carriers; peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple **sclerosis** patients)

IT Drug delivery systems
(injections, i.v.; peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple **sclerosis** patients)

IT Drug delivery systems
(injections, intrathecal; peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple **sclerosis** patients)

IT Multiple **sclerosis**
Protein sequences
(peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple **sclerosis** patients)

IT Peptides, biological studies
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple **sclerosis** patients)

IT **11084-77-8**, Myelin basic protein (human)
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)
(amino acid sequence; peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple **sclerosis** patients)

IT 144449-89-8 144449-90-1 144449-94-5 152074-97-0 155029-61-1
160219-22-7 160219-24-9 171205-21-3 178273-99-9 346426-58-2
346426-60-6
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple **sclerosis** patients)

L4 ANSWER 5 OF 15 CAPLUS COPYRIGHT 2002 ACS
PY 2001
2001
1996
1999
2000
2000
2000
2001
2002
2002
TI Methods for treatment of multiple **sclerosis** using peptide analogs of human myelin basic protein
SO U.S., 33 pp., Cont.-in-part of U.S. Ser. No. 342,408.
CODEN: USXXAM
AB The present invention is directed toward peptide analogs of human myelin

basic protein. The peptide analog is at least seven amino acids long and derived from residues 83 to 99 of human myelin basic protein. The analogs are altered from the native sequence at least at positions 91, 95, or 97. Addnl. alterations may be made at other positions. Pharmaceutical compns. contg. these peptide analogs are provided. The peptide analogs are useful for treating multiple **sclerosis**.

IN Gaur, Amitabh; Conlon, Paul; Ling, Nicholas C.; Staehelin, Theophil; Crowe, Paul D.

TI Methods for treatment of multiple **sclerosis** using peptide analogs of human myelin basic protein

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI US 6251396	B1	20010626	US 1998-137759	19980820	
US 6329499	B1	20011211	US 1994-342408	19941118	
CA 2204147	AA	19960530	CA 1995-2204147	19951116	<--
AU 9936858	A1	19990826	AU 1999-36858	19990629	<--
AU 723254	B2	20000824			
WO 2000011027	A1	20000302	WO 1999-US19033	19990819	<--

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9960200	A1	20000314	AU 1999-60200	19990819	<--
EP 1105419	A1	20010613	EP 1999-967832	19990819	

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

US 6379670	B1	20020430	US 1999-378244	19990819	
US 2002086976	A1	20020704	US 2001-15540	20011211	

AB . . . made at other positions. Pharmaceutical compns. contg. these peptide analogs are provided. The peptide analogs are useful for treating multiple **sclerosis**.

ST multiple **sclerosis** myelin basic protein peptide

IT Alums
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(adjuvant; treatment of multiple **sclerosis** using peptide analogs of human myelin basic protein)

IT Immunostimulants
(adjuvants; treatment of multiple **sclerosis** using peptide analogs of human myelin basic protein)

IT Drug delivery systems
(carriers; treatment of multiple **sclerosis** using peptide analogs of human myelin basic protein)

IT T cell (lymphocyte)
(helper cell/inducer, TH2, immune response; treatment of multiple **sclerosis** using peptide analogs of human myelin basic protein)

IT Myelin basic protein
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(peptide analogs; treatment of multiple **sclerosis** using peptide analogs of human myelin basic protein)

IT Multiple **sclerosis**
Protein sequences
cDNA sequences
(treatment of multiple **sclerosis** using peptide analogs of

human myelin basic protein)

IT Peptides, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(treatment of multiple **sclerosis** using peptide analogs of human myelin basic protein)

IT 178823-45-5 178823-46-6 178823-47-7 178823-48-8 178823-49-9
178823-50-2
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(treatment of multiple **sclerosis** using peptide analogs of human myelin basic protein)

IT 242133-54-6
RL: PRP (Properties)
(unclaimed nucleotide sequence; methods for treatment of multiple **sclerosis** using peptide analogs of human myelin basic protein)

IT **11084-77-8**
RL: PRP (Properties)
(unclaimed protein sequence; methods for treatment of multiple **sclerosis** using peptide analogs of human myelin basic protein)

L4 ANSWER 6 OF 15 CAPLUS COPYRIGHT 2002 ACS
PY 2000
2002
2002
TI DNA vaccination for treatment of autoimmune disease
SO PCT Int. Appl., 50 pp.
CODEN: PIXXD2
AB A pro-inflammatory T cell response is specifically suppressed by the injection into a recipient of DNA encoding an autoantigen assocd. with autoimmune disease. The autoantigen is e.g. myelin protein, proteolipid protein, myelin basic protein, myelin oligodendrocyte protein, and myelin-assocd. protein. The recipient may be further treated by co-vaccination with a DNA encoding a Th2 cytokine, particularly encoding IL4. In response to the vaccination, the proliferation of autoantigen-reactive T cells and the secretion of Th1 cytokines, including IL-2, IFN-.gamma. and IL-15, are reduced.
IN Steinman, Lawrence; Ruiz, Pedro Jose; Garren, Hideki
PI WO 2000053019 A1 **20000914**

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000053019	A1	20000914	WO 2000-US6233	20000310 <--
EP 1168923	A1	20020109	EP 2000-912207	20000310
US 2002068715	A1	20020606	US 2001-947770	20010905

PI W: CA, JP, US, ZA
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

IT Autoimmune disease
DNA sequences
Inflammation
Mammal (Mammalia)
Molecular cloning
Multiple **sclerosis**
Plasmids
Protein sequences
Transplant and Transplantation
Vaccines

(DNA vaccine encoding autoantigen and Th2 cytokine for treatment of autoimmune disease)

IT **11084-77-8P** 104950-38-1P, Interleukin 4 (human clone 46 precursor protein moiety reduced) 294215-32-0P, Proteolipid protein (human)
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(amino acid sequence; DNA vaccine encoding autoantigen and Th2 cytokine for treatment of autoimmune disease)

L4 ANSWER 7 OF 15 CAPLUS COPYRIGHT 2002 ACS
PY 2000
2001
2000
2001
TI Methods for treatment of multiple **sclerosis** using peptide analogs of human myelin basic protein
SO PCT Int. Appl., 112 pp.
CODEN: PIXXD2
AB Peptide analogs of human myelin basic protein are disclosed. The peptide analogs are at least seven amino acids long and derived from residues 83-99 of human myelin basic protein. The analogs are altered from the native sequence at least at positions 91, 95 or 97. Addnl. alterations may be made at other positions. Pharmaceutical compns. contg. these peptide analogs are provided. The peptide analogs are useful for inducing a Th2 immune response to myelin basic protein and treating multiple **sclerosis**.
IN Gaur, Amitabh; Conlon, Paul; Ling, Nicholas C.; Staehlin, Theophil; Crowe, Paul
TI Methods for treatment of multiple **sclerosis** using peptide analogs of human myelin basic protein
PI WO 2000011027 A1 **20000302**

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000011027	A1	20000302	WO 1999-US19033	19990819 <--
US 6251396	B1	20010626	US 1998-137759	19980820
AU 9960200	A1	20000314	AU 1999-60200	19990819 <--
EP 1105419	A1	20010613	EP 1999-967832	19990819

PI W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
AB . . . are provided. The peptide analogs are useful for inducing a Th2 immune response to myelin basic protein and treating multiple **sclerosis**.
ST myelin basic protein peptide multiple **sclerosis**; Th2 immunity
myelin basic protein peptide
IT Cell proliferation
(T cell; peptide analogs of human myelin basic protein for treatment of multiple **sclerosis**)
IT Cytotoxic agents
(T-cell; peptide analogs of human myelin basic protein for treatment of multiple **sclerosis**)

IT Interleukin 10
Interleukin 13
Interleukin 4
Interleukin 5
Interleukin 9
Tumor necrosis factors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(TNF-.alpha.; peptide analogs of human myelin basic protein for treatment of multiple **sclerosis**)

IT Peptides, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(analogs; peptide analogs of human myelin basic protein for treatment of multiple **sclerosis**)

IT Encephalomyelitis
(autoimmune; peptide analogs of human myelin basic protein for treatment of multiple **sclerosis**)

IT T cell (lymphocyte)
(helper cell/inducer, TH1; peptide analogs of human myelin basic protein for treatment of multiple **sclerosis**)

IT T cell (lymphocyte)
(helper cell/inducer, TH2; peptide analogs of human myelin basic protein for treatment of multiple **sclerosis**)

IT Drug delivery systems
Immunomodulators
(peptide analogs of human myelin basic protein for treatment of multiple **sclerosis**)

IT Myelin basic protein
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(peptide analogs of human myelin basic protein for treatment of multiple **sclerosis**)

IT Proliferation inhibition
(proliferation inhibitors, T-cell; peptide analogs of human myelin basic protein for treatment of multiple **sclerosis**)

IT T cell (lymphocyte)
(proliferation; peptide analogs of human myelin basic protein for treatment of multiple **sclerosis**)

IT Protein degradation
(redn. of; peptide analogs of human myelin basic protein for treatment of multiple **sclerosis**)

IT Multiple **sclerosis**
(therapeutic agents; peptide analogs of human myelin basic protein for treatment of multiple **sclerosis**)

IT Interferons
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(.gamma., TNF-.alpha.; peptide analogs of human myelin basic protein for treatment of multiple **sclerosis**)

IT Amino acids, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(D-; peptide analogs of human myelin basic protein for treatment of multiple **sclerosis**)

IT 118506-26-6 158401-73-1 158401-77-5 158401-79-7 178696-41-8
178696-42-9 178696-43-0 178696-44-1 178696-45-2 178696-46-3
178696-47-4 178696-48-5 178696-49-6 178823-45-5 178823-51-3
178823-52-4 178823-53-5 178823-54-6 178823-55-7 178823-56-8
178823-57-9 178823-58-0 178823-59-1 178823-60-4 178823-61-5
178823-62-6 178823-63-7 178823-64-8 178823-65-9 178823-66-0

178823-67-1 179866-71-8 179866-72-9 179866-73-0
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(peptide analogs of human myelin basic protein for treatment of multiple **sclerosis**)

IT 178823-45-5D, analogs 178823-46-6 178823-47-7 178823-48-8
178823-49-9 178823-50-2
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(peptide analogs of human myelin basic protein for treatment of multiple **sclerosis**)

IT 259726-96-0
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(peptide analogs of human myelin basic protein for treatment of multiple **sclerosis**)

IT 242133-54-6
RL: PRP (Properties)
(unclaimed nucleotide sequence; methods for treatment of multiple **sclerosis** using peptide analogs of human myelin basic protein)

IT **11084-77-8**
RL: PRP (Properties)
(unclaimed protein sequence; methods for treatment of multiple **sclerosis** using peptide analogs of human myelin basic protein)

L4 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2002 ACS
PY 1999
1999
1999
2001
2002
TI Use of neglected target tissue antigens in modulation of immune responses
SO PCT Int. Appl., 79 pp.
CODEN: PIXXD2
AB Disclosed are methods for identifying antigens, termed neglected target tissue antigens (NTTA), that do not become involved as targets of an abnormal immune response (such as allergy or autoimmunity or more generally inflammation); also disclosed are methods of using NTTA for inducing regulatory responses and thereby abating abnormal inflammatory immune responses. The NTTA peptide is selected from insulin, glutamic acid decarboxylase, amylin, calbindin, islet amyloid polypeptide precursor, neuropeptide Y, myelin basic protein proteolipid protein, oligodendrocyte myelin glycoprotein, cartilage oligomeric matrix protein, decorin, link protein and precursors, rhodopsin, interphotoreceptor retinoid-binding protein, retinoid binding protein, retinal phosphodiesterase, bestrophin, and peripherin.
IN Kaufman, Daniel L.; Tian, Jide; Olcott, Angelica
PI WO 9956763 A1 **19991111**

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9956763	A1	19991111	WO 1999-US10250	19990507 <--

PI W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

09921880

CA 2328108	AA	19991111	CA 1999-2328108	19990507 <--
AU 9938966	A1	19991123	AU 1999-38966	19990507 <--
EP 1094828	A1	20010502	EP 1999-921860	19990507
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002513765	T2	20020514	JP 2000-546787	19990507

IT Allergy
Autoimmune disease
Immune tolerance
Immunotherapy
Inflammation
Multiple **sclerosis**
Protein sequences
Rheumatoid arthritis
(neglected target tissue antigens or NTTA peptides for treating autoimmune diseases, allergies and inflammations)

IT 92307-59-0 102037-53-6, Glycoprotein (rat cartilage link protein moiety reduced) 103715-96-4, Glycoprotein (chicken cartilage link precursor protein moiety reduced) 106282-91-1 **111518-60-6**, Protein (human clone RK187 20.2-kilodalton myelin basic) 112956-39-5, Protein (human clone HBSC21/HBSC27 vitamin D-dependent calcium-binding reduced) 117871-30-4 135846-19-4, Calretinin (human reduced) 136894-84-3, Glycoprotein (human clone HLP(C)-1/HLP(C)-2 cartilage link precursor protein moiety reduced) 145187-60-6 148972-55-8, Calcyclin (rabbit clone pCalC) 169742-92-1 180033-06-1 219678-53-2 250232-16-7 250232-19-0 250232-25-8 250232-32-7 250232-34-9 250232-40-7 250241-17-9
RL: PRP (Properties)
(unclaimed protein sequence; use of neglected target tissue antigens in modulation of immune responses)

L4 ANSWER 9 OF 15 CAPLUS COPYRIGHT 2002 ACS
PY 1999
TI Methods for treatment of multiple **sclerosis** utilizing peptide analogues of human myelin basic protein
SO U.S., 35 pp., Cont.-in-part of U.S. Ser. No. 402,992, abandoned.
CODEN: USXXAM
AB The present invention provides peptide analogs of human myelin basic protein (MBP) which are suitable for the treatment of multiple **sclerosis**. Within one aspect, peptide analogs are at least seven amino acids long and derived from residues 86 to 99 of human MBP. In addn., such analogs may be altered from the native sequence at positions 87, 88, 97, 98 or 99 to a D-amino acid. Addnl. alterations may be made at other positions. Pharmaceutical compns. contg. these peptide analogs are also provided, as well as methods for treating multiple **sclerosis** . The ability of MBP peptides and peptide analogs to bind to MHC is measured. For example, the peptide analog h88 contg. amino acids 86-99 of human MBP in which L-histidine at residue 88 is altered to D-histidine (50 .mu.M) inhibited the binding of biotinylated MBP 86-99 to a greater extend than did MBP 87-99 (50 .mu.M). It can be inferred that binding of h88 to MHC Class II mols. is greater than that of MBP 86-99. In addn., A97, another peptide analog which consists of amino acids 86-99 of human MBP, except that L-arginine at residue 97 is altered to L-alanine, inhibited binding of biotin-labeled MBP 86-99 to MHC.
IN Gaur, Amitabh; Conlon, Paul J.; Ling, Nicholas
TI Methods for treatment of multiple **sclerosis** utilizing peptide analogues of human myelin basic protein

PI	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	US 5948764 A		**19990907**		
PI	US 5948764	A	19990907	US 1997-781122	19970109 <--

09921880

AB The present invention provides peptide analogs of human myelin basic protein (MBP) which are suitable for the treatment of multiple **sclerosis**. Within one aspect, peptide analogs are at least seven amino acids long and derived from residues 86 to 99 of. . . made at other positions. Pharmaceutical compns. contg. these peptide analogs are also provided, as well as methods for treating multiple **sclerosis** . The ability of MBP peptides and peptide analogs to bind to MHC is measured. For example, the peptide analog h88. . .

ST myelin basic protein peptide multiple **sclerosis**

IT Histocompatibility antigens
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(MHC (major histocompatibility complex), binding to; peptide analogs of human myelin basic protein for treatment of multiple **sclerosis**)

IT Histocompatibility antigens
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(MHC (major histocompatibility complex), class II, binding to; peptide analogs of human myelin basic protein for treatment of multiple **sclerosis**)

IT Cell activation
Cell proliferation
(T cell; peptide analogs of human myelin basic protein for treatment of multiple **sclerosis**)

IT T cell (lymphocyte)
(activation; peptide analogs of human myelin basic protein for treatment of multiple **sclerosis**)

IT Encephalomyelitis
(autoimmune, induction and treatment of; peptide analogs of human myelin basic protein for treatment of multiple **sclerosis**)

IT Interleukin 2
Interleukin 4
RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)
(induction of; peptide analogs of human myelin basic protein for treatment of multiple **sclerosis**)

IT Apoptosis
DNA sequences
Multiple **sclerosis**
Protein sequences
(peptide analogs of human myelin basic protein for treatment of multiple **sclerosis**)

IT Myelin basic protein
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(peptide analogs of human myelin basic protein for treatment of multiple **sclerosis**)

IT T cell (lymphocyte)
(proliferation; peptide analogs of human myelin basic protein for treatment of multiple **sclerosis**)

IT Multiple **sclerosis**
(therapeutic agents; peptide analogs of human myelin basic protein for treatment of multiple **sclerosis**)

IT Interferons
RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)
(.gamma., induction of; peptide analogs of human myelin basic protein for treatment of multiple **sclerosis**)

IT **11084-77-8**
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

08/03/01

(amino acid sequence; peptide analogs of human myelin basic protein for treatment of multiple **sclerosis**)

IT 242133-54-6
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(nucleotide sequence; peptide analogs of human myelin basic protein for treatment of multiple **sclerosis**)

IT 183544-81-2 183544-82-3
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(peptide analogs of human myelin basic protein for treatment of multiple **sclerosis**)

L4 ANSWER 10 OF 15 CAPLUS COPYRIGHT 2002 ACS
PY 1996
1996
1996
1998
1999
TI Modified myelin protein molecules for diagnosis and treatment of multiple **sclerosis**
SO PCT Int. Appl., 155 pp.
CODEN: PIXXD2
AB Mols. related to the human proteolipid protein (PLP) and/or human myelin basic protein (MBP) are provided for the clin. assessment, diagnosis, and treatment of multiple **sclerosis**. The mols. include nucleic acids which are useful in the prodn. of modified PLP polypeptides and modified MBP polypeptides, such polypeptides being useful for assaying T-cells for responsiveness to PLP and MBP epitopes. The polypeptides are also useful as therapeutic agents that act by inducing T-cell responses, including anergy and apoptosis, as means of treating multiple **sclerosis**. Construction of bacterial vectors directing the expression of MBP polypeptides and PLP muteins, and purifn. and characterization of recombinant MBP, are described. The PLP polypeptides induced T-cell responses and affected T-cell reactivity to a variety of MBP and PLP epitopes, and can induce, prevent, and treat exptl. allergic encephalomyelitis.
IN Mueller, John P.; Lenardo, Michael J.; McFarland, Henry F.; Matis, Louis; Mueller, Eileen Elliott; Nye, Steven H.; Pelfrey, Clara M.; Squinto, Stephen P.; Wilkins, James A.
TI Modified myelin protein molecules for diagnosis and treatment of multiple **sclerosis**
PI WO 9634622 A1 **19961107**

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9634622	A1	19961107	WO 1996-US5611	19960422 <--
W: AL, AM, AU, BB, BG, BR, CA, CN, CZ, EE, FI, GE, HU, IS, JP, KG, KP, KR, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2218858	AA	19961107	CA 1996-2218858	19960422 <--
AU 9655658	A1	19961121	AU 1996-55658	19960422 <--
EP 830139	A1	19980325	EP 1996-913035	19960422 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE, PT, IE				
JP 11511650	T2	19991012	JP 1996-533344	19960422 <--

AB . . . proteolipid protein (PLP) and/or human myelin basic protein (MBP) are provided for the clin. assessment, diagnosis, and treatment of multiple **sclerosis**. The mols. include nucleic acids which are

useful in the prodn. of modified PLP polypeptides and modified MBP polypeptides, such. . . also useful as therapeutic agents that act by inducing T-cell responses, including anergy and apoptosis, as means of treating multiple **sclerosis**. Construction of bacterial vectors directing the expression of MBP polypeptides and PLP muteins, and purifn. and characterization of recombinant MBP,. . .

ST recombinant myelin protein multiple **sclerosis**; proteolipid protein recombinant multiple **sclerosis**

IT Glycolipoproteins
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(OM, fusion products, with proteolipid protein; modified myelin proteins for diagnosis and treatment of multiple **sclerosis**)

IT Bacteria (Eubacteria)
(expression vectors; modified myelin proteins for diagnosis and treatment of multiple **sclerosis**)

IT Gene, animal
RL: BPN (Biosynthetic preparation); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PREP (Preparation); PROC (Process)
(for myelin basic protein of human; modified myelin proteins for diagnosis and treatment of multiple **sclerosis**)

IT Bioassay
(for myelin basic protein; modified myelin proteins for diagnosis and treatment of multiple **sclerosis**)

IT Diagnosis
Immune tolerance
Multiple **sclerosis**
T cell (lymphocyte)
(modified myelin proteins for diagnosis and treatment of multiple **sclerosis**)

IT Myelin basic protein
Proteolipid protein
RL: ANT (Analyte); BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(modified myelin proteins for diagnosis and treatment of multiple **sclerosis**)

IT Blood
Cerebrospinal fluid
Lymph node
(myelin basic protein in, T-cell tolerance by; modified myelin proteins for diagnosis and treatment of multiple **sclerosis**)

IT Nucleic acids
RL: BPN (Biosynthetic preparation); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PREP (Preparation); PROC (Process)
(myelin basic protein-specifying and proteolipid protein-specifying; modified myelin proteins for diagnosis and treatment of multiple **sclerosis**)

IT **104138-16-1P**, Protein (human 21.5-kilodalton myelin basic) 184828-49-7P **184890-65-1P** 184890-66-2P 184890-67-3P **184890-68-4P** **184890-69-5P** **184890-70-8P** **184890-71-9P** 184890-72-0P 184890-80-0P, Proteolipid protein (human mutein .DELTA.PLP3) 184890-81-1P, Proteolipid protein (human mutein .DELTA.PLP4)
RL: ANT (Analyte); BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP

(Properties); PUR (Purification or recovery); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(modified myelin proteins for diagnosis and treatment of multiple **sclerosis**)

IT 111518-37-7P, DNA (human clone RK41 21.5-kilodalton myelin basic protein cDNA) 184890-73-1P 184890-74-2P 184890-75-3P 184890-76-4P 184890-77-5P 184890-78-6P 184890-79-7P
RL: BPN (Biosynthetic preparation); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PREP (Preparation); PROC (Process)
(modified myelin proteins for diagnosis and treatment of multiple **sclerosis**)

L4 ANSWER 11 OF 15 CAPLUS COPYRIGHT 2002 ACS

PY 1996
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TI Myelin autoantigen-derived peptide compositions and treatment for multiple **sclerosis**

SO PCT Int. Appl., 90 pp.
CODEN: PIXXD2

AB The present invention provides isolated peptides and combinations of peptides derived form myelin autoantigens such as MBP, MOG, PLP, and MAG suitable for treating multiple **sclerosis**, including prophylactic and therapeutic compns. and methods for preventing or treating multiple **sclerosis**. Preferred compns. of the invention comprise at least one isolated, purified peptide, free from all other polypeptides or contaminants, the peptide comprising an amino acid sequence, the myelin autoantigen which has T cell activity. A therapeutic compn. of the invention is capable of down regulating the autoantigen specific immune response to the myelin autoantigen in a population of humans suffering from, or susceptible to multiple **sclerosis**, such that disease symptoms are reduced, eliminated, or reversed and/or the onset or progression of disease symptoms is prevented or slowed. Addnl., compns. and methods of the instant invention when administered in an advanced stage of disease, reverse ongoing paralysis or other signs of disease when administered during the acute phase of disease or prevents relapse when administered during remission.

IN Smilek, Dawn; Samson, Michael; Gefter, Malcolm; Hsu, Di-Hwei; Shi, Jia-Dong; Paliard, Xavier; Devaux, Brigitte; Rothbard, Jonathan; Franzen, Henry

TI Myelin autoantigen-derived peptide compositions and treatment for multiple **sclerosis**

PI WO 9612737 A2 **19960502**

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9612737	A2	19960502	WO 1995-US13682	19951025 <--
WO 9612737	A3	19961010		

W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT

RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

CA 2203629	AA	19960502	CA 1995-2203629	19951025 <--
AU 9642782	A1	19960515	AU 1996-42782	19951025 <--
ZA 9509033	A	19960611	ZA 1995-9033	19951025 <--
EP 787147	A1	19970806	EP 1995-941330	19951025 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
BR 9509438	A	19971223	BR 1995-9438	19951025 <--
HU 77047	A2	19980302	HU 1997-1843	19951025 <--
JP 10504039	T2	19980414	JP 1995-514109	19951025 <--
FI 9701750	A	19970624	FI 1997-1750	19970424 <--
NO 9701900	A	19970625	NO 1997-1900	19970424 <--

AB . . . peptides and combinations of peptides derived form myelin autoantigens such as MBP, MOG, PLP, and MAG suitable for treating multiple **sclerosis**, including prophylactic and therapeutic compns. and methods for preventing or treating multiple **sclerosis**. Preferred compns. of the invention comprise at least one isolated, purified peptide, free from all other polypeptides or contaminants, the. . . the autoantigen specific immune response to the myelin autoantigen in a population of humans suffering from, or susceptible to multiple **sclerosis**, such that disease symptoms are reduced, eliminated, or reversed and/or the onset or progression of disease symptoms is prevented or. . .

ST myelin autoantigen peptide multiple **sclerosis** therapy; antigen auto myelin peptide multiple **sclerosis**

IT Autoimmune disease
Immunity
Mammal
Multiple **sclerosis**
Protein sequences
(myelin autoantigen-derived peptide compns. and treatment for multiple **sclerosis**)

IT Glycophosphoproteins
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(MAG (myelin-assocd. glycoprotein), myelin autoantigen-derived peptide compns. and treatment for multiple **sclerosis**)

IT Phospholipoproteins
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(MBP (myelin basic protein), myelin autoantigen-derived peptide compns. and treatment for multiple **sclerosis**)

IT Histocompatibility antigens
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(MHC (major histocompatibility antigen complex), class II, T cell receptor binding; myelin autoantigen-derived peptide compns. and treatment for multiple **sclerosis**)

IT Glycoproteins, specific or class
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(MOG (myelin-oligodendroglial glycoprotein), myelin autoantigen-derived peptide compns. and treatment for multiple **sclerosis**)

IT Lymphocyte
(T-cell, myelin autoantigen-derived peptide compns. and treatment for multiple **sclerosis**)

IT Antigen receptors
Receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(TCR (T-cell antigen receptor), MHC class II antigen binding; myelin autoantigen-derived peptide compns. and treatment for multiple **sclerosis**)

IT Antigens
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(auto-, myelin; myelin autoantigen-derived peptide compns. and treatment for multiple **sclerosis**)

IT Phospholipoproteins
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(lipophilins, myelin autoantigen-derived peptide compns. and treatment for multiple **sclerosis**)

IT Interferons
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.beta., myelin autoantigen-derived peptide compns. and treatment for multiple **sclerosis**)

IT 178304-40-0
RL: PRP (Properties)
(amino acid sequence; myelin autoantigen-derived peptide compns. and treatment for multiple **sclerosis**)

IT **124364-89-2**, Phospholipoprotein MBP (human 18.5-kilodalton isoform C-8 deblocked protein moiety)
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amino acid sequence; myelin autoantigen-derived peptide compns. and treatment for multiple **sclerosis**)

IT 118506-26-6 129988-07-4 129988-08-5 129988-09-6 130184-08-6
130184-09-7 152074-94-7 152074-95-8 152074-96-9 152074-97-0
152074-98-1 152075-00-8 152075-01-9 152075-02-0 152075-87-1
152846-85-0 152870-67-2 164981-18-4 164981-31-1 164981-49-1
164981-50-4 164981-51-5 164981-52-6 167319-80-4 173071-55-1
173071-56-2 178328-55-7 178328-56-8 178328-57-9 178328-58-0
178328-59-1 178328-60-4 178328-61-5 178328-62-6 178328-63-7
178328-64-8 178328-65-9 178328-66-0 178328-67-1 178328-68-2
178328-69-3 178328-70-6 178328-71-7 178328-72-8 178328-73-9
178328-74-0 178328-75-1 178328-76-2 178328-77-3 178328-78-4
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(myelin autoantigen-derived peptide compns. and treatment for multiple **sclerosis**)

L4 ANSWER 12 OF 15 CAPLUS COPYRIGHT 2002 ACS
PY 1996
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TI Myelin basic protein peptides for treatment of multiple **sclerosis** patients
SO PCT Int. Appl., 52 pp.
CODEN: PIXXD2

09921880

AB Peptides R1-Val-His-Phe-Phe-Lys-Asn-Ile-R2 (R1,R2=H, OH, amino acid, peptide; R1.noteq.R2=H,OH) derived from myelin basic protein, which are capable of neutralizing or modulating prodn. of anti-myelin basic protein antibodies, are claimed. These peptides may be used in treatment of multiplex **sclerosis**. Human myelin basic protein (h-MBP) has a mol. wt. of 18.5 KD and contains 170 amino acid residues. Synthetic peptides ranging in length from about 8 to 25 residues and covering the entire length of the protein have been produced. Antibodies to h-MBP (anti-MBP) were found to be neutralized by the synthetic peptides, in vitro, which span the h-MBP from about amino acid residue 61 to about amino acid residue 106. The peptides, which cover both the amino (about residues 1 to 63) and carboxy (about residues 117 to 162) terminals of h-MBP did not neutralize purified anti-MBP. Intrathecal administration of peptide MBP75-95, either as a single dose, or as repeated injections for periods up to 10 wk, produced complete binding-neutralization of free (F) anti-MBP with no change in bound (B) levels. A control peptide MBP35-58 had no effect on F or B anti-MBP levels. I.v. administration of MBP75-95 resulted in significant decline of F and B CSF anti-MBP levels over a period of one month. Administration of MBP synthetic peptides to **MS** patients either intrathecally or i.v. did not have any adverse neurol. effects and systemic complications did not occur. The MBP epitope for **MS** anti-MBP has been localized to an area between Pro85 and Pro96.

IN Warren, Kenneth G.; Catz, Ingrid

TI Myelin basic protein peptides for treatment of multiple **sclerosis** patients

PI WO 9612731 A1 **19960502**

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9612731	A1	19960502	WO 1995-CA583	19951020 <--

PI W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT

RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

CA 2203018	AA	19960502	CA 1995-2203018	19951020 <--
AU 9536478	A1	19960515	AU 1995-36478	19951020 <--
AU 713546	B2	19991202		
EP 789709	A1	19970820	EP 1995-934017	19951020 <--
EP 789709	B1	20010523		

R: AT, BE, CH, DE, DK, ES, FR, GB, IE, IT, LI, LU, NL, SE

HU 76977	A2	19980128	HU 1997-1679	19951020 <--
HU 217633	B	20000328		
RU 2157815	C2	20001020	RU 1997-107853	19951020 <--
ES 2159322	T3	20011001	ES 1995-934017	19951020
RO 117096	B1	20011030	RO 1997-769	19951020
PL 182508	B1	20020131	PL 1995-319835	19951020
FI 9701662	A	19970617	FI 1997-1662	19970418 <--
NO 9701829	A	19970623	NO 1997-1829	19970421 <--

AB . . . neutralizing or modulating prodn. of anti-myelin basic protein antibodies, are claimed. These peptides may be used in treatment of multiplex **sclerosis**. Human myelin basic protein (h-MBP) has a mol. wt. of 18.5 KD and contains 170 amino acid residues. Synthetic peptides. . . decline of F and B CSF anti-MBP levels over a period of one month. Administration of MBP synthetic peptides to **MS** patients either intrathecally or i.v. did not have any adverse neurol. effects and systemic complications did not occur. The MBP epitope for **MS** anti-MBP has been localized to an area between Pro85 and Pro96.

ST myelin basic protein peptide multiple **sclerosis**

08/03/01

09921880

IT Multiple **sclerosis**
(treatment of; myelin basic protein peptides for treatment of multiple **sclerosis** patients)
IT Phospholipoproteins
RL: MSC (Miscellaneous)
(MBP (myelin basic protein), myelin basic protein peptides for treatment of multiple **sclerosis** patients)
IT **124364-89-2**, Phospholipoprotein MBP (human 18.5-kilodalton isoform C-8 deblocked protein moiety)
RL: MSC (Miscellaneous)
(myelin basic protein peptides for treatment of multiple **sclerosis** patients)
IT 155029-61-1 160219-22-7 160219-24-9 171205-21-3 178273-97-7D, derivs. 178273-98-8 178273-99-9 178274-00-5
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(myelin basic protein peptides for treatment of multiple **sclerosis** patients)

L4 ANSWER 13 OF 15 CAPLUS COPYRIGHT 2002 ACS
PY **1995**
TI Fine specificity of the antibody response to myelin basic protein in the central nervous system in multiple **sclerosis**: the minimal B-cell epitope and a model of its features
SO Proceedings of the National Academy of Sciences of the United States of America (**1995**), 92(24), 11061-5
CODEN: PNASA6; ISSN: 0027-8424
AB T cells, B cells, and antibody are found in the white matter of the central nervous system in multiple **sclerosis**. The epitope center for the antibody response to human myelin basic protein (MBP) fits precisely the minimal epitope Pro85-Val-Val-His-Phe-Phe-Lys-Asn-Ile-Val-Thr-Pro96 for that reported for HLA DR2b (DRB1*1501)-restricted T cells that recognize MBP and overlaps with the reported DR2a-restricted epitope for T cells reactive to MBP. The authors describe a mol. model of this epitope.
AU Warren, K. G.; Catz, Ingrid; Steinman, Lawrence
TI Fine specificity of the antibody response to myelin basic protein in the central nervous system in multiple **sclerosis**: the minimal B-cell epitope and a model of its features
SO Proceedings of the National Academy of Sciences of the United States of America (**1995**), 92(24), 11061-5
CODEN: PNASA6; ISSN: 0027-8424
AB T cells, B cells, and antibody are found in the white matter of the central nervous system in multiple **sclerosis**. The epitope center for the antibody response to human myelin basic protein (MBP) fits precisely the minimal epitope Pro85-Val-Val-His-Phe-Phe-Lys-Asn-Ile-Val-Thr-Pro96 for. . .
ST antibody myelin basic protein multiple **sclerosis**; epitope MBP protein multiple **sclerosis**
IT Multiple **sclerosis**
(fine epitope specificity of autoantibody to myelin basic protein from humans with)
IT Brain
Cerebrospinal fluid
(fine epitope specificity of autoantibody to myelin basic protein from humans with multiple **sclerosis**)
IT Phospholipoproteins
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(MBP (myelin basic protein), fine epitope specificity of anti-MBP autoantibody from humans with multiple **sclerosis**)
IT Antibodies

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(auto-, fine epitope specificity of autoantibody to myelin basic protein from humans with multiple **sclerosis**)

IT 102623-11-0 **124364-89-2**, Phospholipoprotein MBP (human 18.5-kilodalton isoform C-8 deblocked protein moiety) 171205-20-2 171205-21-3
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(fine epitope specificity of autoantibody to myelin basic protein from humans with multiple **sclerosis**)

L4 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2002 ACS
PY **1995**
TI Purification of immunologically active recombinant 21.5 kDa isoform of human myelin basic protein
SO Molecular Immunology (**1995**), 32(14/15), 1131-41
CODEN: MOIMD5; ISSN: 0161-5890
AB We have designed and expressed in bacteria a recombinant fetal form of human myelin basic protein (21.5 kDa isoform;rhMBP21.5), a candidate autoantigen in multiple **sclerosis**. An exon 2 insertion, carboxy-terminal histidine tag and preferred bacterial codons differentiate the MBP21.5 gene from the endcoding the adult, brain-derived form of human MBP (18.5 kDa isoform;hMBP18.5). MBPs were expressed at high levels in E. coli and extd. from whole cells by simultaneous acid solubilization and mech. disruption. A nearly two-fold increase in recombinant protein was detected in strains harboring MBP genes with bacterial preferred codons compared to genes contg. human codons. The recombinant mols. were purified in two steps, first by reversed-phase chromatog. sepn. and then by metal affinity chromatog. Dimeric forms of recombinant MBP21.5 were detected under physiol. conditions, however, substitution of a serine for the single cysteine at amino acid residue 81 resulted in only monomer formation. All forms of recombinant MBPs induced proliferative responses of human T lymphocytes specific for epitopes in MBO18.5 kDa. In contrast, human T cell lines that recognize an exon 2-encoded epitope of MBP responded to the 21.5 kDa isoform of MBP, but not the 18.5 kDa isoform.
AU Nye, Steven H.; Pelfrey, Clara M.; Burkwit, Jeffrey J.; Voskuhl, Rhonda R.; Lenardo, Michael J.; Mueller, John P.
SO Molecular Immunology (**1995**), 32(14/15), 1131-41
CODEN: MOIMD5; ISSN: 0161-5890
AB . . . expressed in bacteria a recombinant fetal form of human myelin basic protein (21.5 kDa isoform;rhMBP21.5), a candidate autoantigen in multiple **sclerosis**. An exon 2 insertion, carboxy-terminal histidine tag and preferred bacterial codons differentiate the MBP21.5 gene from the endcoding the adult,. . .
ST human gene MBP215 sequence multiple **sclerosis**; autoantigen myelin basic protein human MBP215; phospholipoprotein MBP human autoantigen sequence isoform
IT Multiple **sclerosis**
(MBP (myelin basic protein) candidate for autoantigen of; purifn. of immunol. active recombinant 21.5 kDa isoform of human myelin basic protein as candidate autoantigen in multiple **sclerosis**)
IT Gene, animal
RL: PRP (Properties)
(MBP21.5, for MBP (myelin basic protein); purifn. of immunol. active recombinant 21.5 kDa isoform of human myelin basic protein as candidate autoantigen in multiple **sclerosis**)
IT Protein sequences
(purifn. of immunol. active recombinant 21.5 kDa isoform of human myelin basic protein as candidate autoantigen in multiple

sclerosis)

IT Phospholipoproteins
RL: PRP (Properties); PUR (Purification or recovery); PREP (Preparation)
(MBP (myelin basic protein), purifn. of immunol. active recombinant 21.5 kDa isoform of human myelin basic protein as candidate autoantigen in multiple **sclerosis**)

IT Lymphocyte
(T-cell, MBP epitopes recognized by; purifn. of immunol. active recombinant 21.5 kDa isoform of human myelin basic protein as candidate autoantigen in multiple **sclerosis**)

IT Antigens
RL: PRP (Properties); PUR (Purification or recovery); PREP (Preparation)
(auto-, MBP (myelin basic protein) candidate for; purifn. of immunol. active recombinant 21.5 kDa isoform of human myelin basic protein as candidate autoantigen in multiple **sclerosis**)

IT Deoxyribonucleic acid sequences
(complementary, purifn. of immunol. active recombinant 21.5 kDa isoform of human myelin basic protein as candidate autoantigen in multiple **sclerosis**)

IT **11084-77-8**
RL: PRP (Properties)
(amino acid sequence; purifn. of immunol. active recombinant 21.5 kDa isoform of human myelin basic protein as candidate autoantigen in multiple **sclerosis**)

IT **173148-38-4P**
RL: PRP (Properties); PUR (Purification or recovery); PREP (Preparation)
(amino acid sequence; purifn. of immunol. active recombinant 21.5 kDa isoform of human myelin basic protein as candidate autoantigen in multiple **sclerosis**)

IT 140032-33-3, Genbank M13577 172711-99-8, Genbank L41657
RL: PRP (Properties)
(nucleotide sequence; purifn. of immunol. active recombinant 21.5 kDa isoform of human myelin basic protein as candidate autoantigen in multiple **sclerosis**)

L4 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2002 ACS
PY **1993**
TI The human myelin basic protein gene is included within a 179-kilobase transcription unit: Expression in the immune and central nervous systems
SO Proceedings of the National Academy of Sciences of the United States of America (**1993**), 90(22), 10695-9
CODEN: PNASA6; ISSN: 0027-8424
AB Two human Golli (for gene expressed in the oligodendrocyte lineage)-MBP (for myelin basic protein) cDNAs have been isolated from a human oligodendroglioma cell line. Anal. of these cDNAs has enabled the authors to det. the entire structure of the human Golli-MBP gene. The Golli-MBP gene, which encompasses the MBP transcription unit, is .apprxeq.179 kb in length and consists of 10 exons, seven of which constitute the MBP gene. The human Golli-MBP gene contains two transcription start sites, each of which gives rise to a family of alternatively spliced transcripts. At least two Golli-MBP transcripts, contg. the first three exons of the gene and one or more MBP exons, are produced from the first transcription start site. The second family of transcripts contains only MBP exons and produces the well-known MBPs. In humans, RNA blot anal. revealed that Golli-MBP transcripts were expressed in fetal thymus, spleen, and human B-cell and macrophage cell lines, as well as in fetal spinal cord. These findings clearly link the expression of exons encoding the autoimmunogen/encephalitogen MBP in the central nervous system to cells and tissues of the immune system through normal expression of the Golli-MBP gene. They also establish that this genetic locus, which includes the MBP gene, is conserved among species, providing further

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evidence that the MBP transcription unit is an integral part of the Golli transcription unit and suggest that this structural arrangement is important for the genetic function and/or regulation of these genes.

AU Pribyl, T. M.; Campagnoni, C. W.; Kampf, K.; Kashima, T.; Handley, V. W.; McMahon, J.; Campagnoni, A. T.

SO Proceedings of the National Academy of Sciences of the United States of America (**1993**), 90(22), 10695-9
CODEN: PNASA6; ISSN: 0027-8424

IT Encephalomyelitis
Multiple **sclerosis**
(myelin basic protein gene expression in immune and central nervous systems in human in relation to)

IT 152926-27-7 **152926-28-8**
RL: PRP (Properties)
(amino acid sequence and expression in immune and central nervous systems of)

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09921880

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     FILE 'REGISTRY, DGENE' ENTERED AT 16:24:16 ON 20 SEP 2002

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L10  ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2002 ACS
RN   178273-99-9  REGISTRY
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     glutaminyl-L-.alpha.-aspartyl-L-.alpha.-glutamyl-L-asparaginyl-L-prolyl-L-
     valyl-L-valyl-L-histidyl-L-phenylalanyl-L-phenylalanyl-L-lysyl-L-
     asparaginyl-L-isoleucyl-L-valyl- (9CI)  (CA INDEX NAME)
OTHER NAMES:
CN   1: PN: US6252040 PAGE: 3/4 claimed sequence
FS   PROTEIN SEQUENCE; STEREOSEARCH
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LC   STN Files:   CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.
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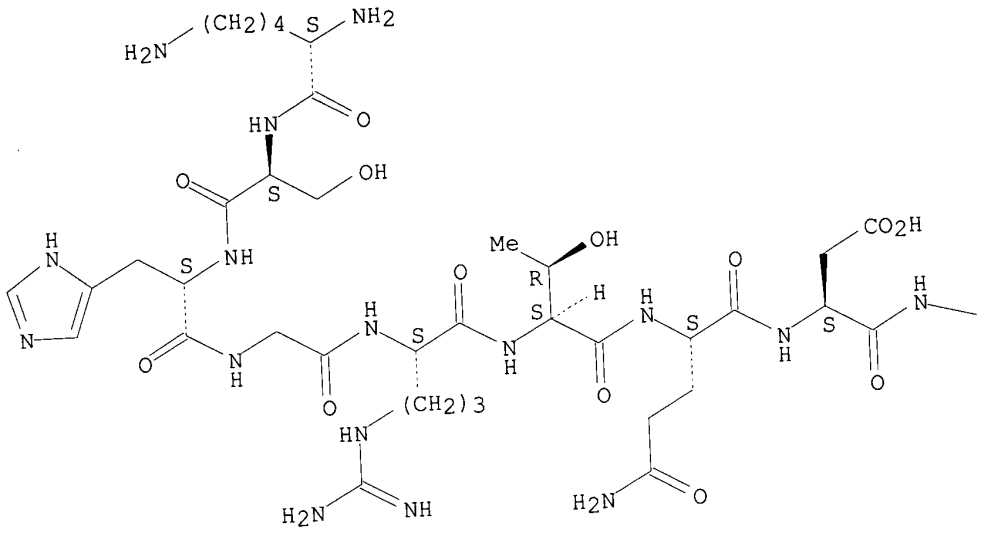
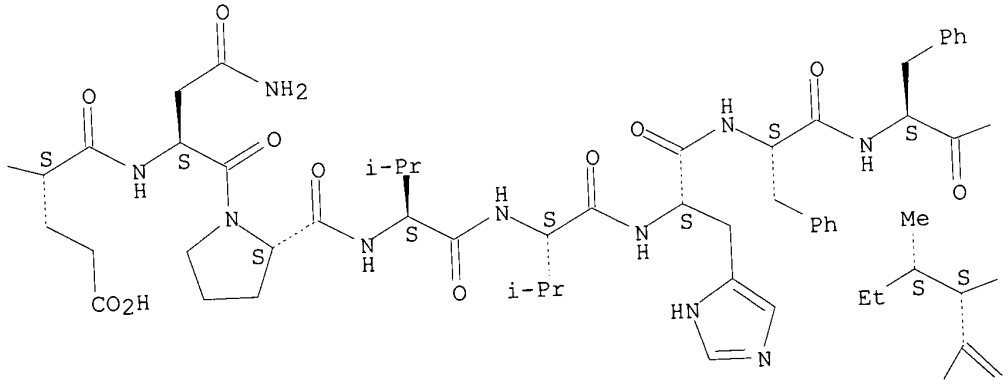


PAGE 1-B



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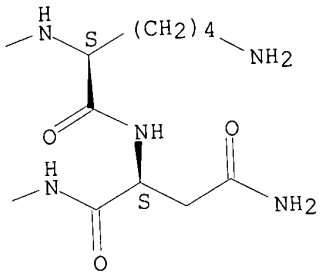

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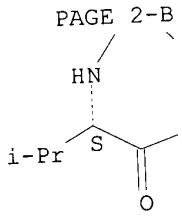

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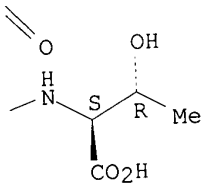

3 REFERENCES IN FILE CA (1962 TO DATE)
3 REFERENCES IN FILE CAPLUS (1962 TO DATE)

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FILE 'REGISTRY' ENTERED AT 16:28:10 ON 20 SEP 2002
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FILE 'BIOSIS, MEDLINE, CAPLUS, EMBASE, SCISEARCH' ENTERED AT 16:28:37 ON 20 SEP 2002
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FILE 'REGISTRY' ENTERED AT 16:55:46 ON 20 SEP 2002
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L13 1 S KNIVTPRTPPPSQGKG/SQEP
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=> FIL BIOSIS MEDLINE CAPLUS EMBASE SCISEARCH

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08/03/01

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L20   8 L18 AND PD<=20010320

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L18 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2002 ACS
TI Peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple **sclerosis** patients
SO U.S., 41 pp., Cont.-in-part of U.S. Ser. No. 7,520.
CODEN: USXXAM
AB Human myelin basic protein (h-MBP) has a mol. wt. of 18.5 KD and contains 170 amino acid residues. Synthetic peptides ranging in length from about 8 to 25 residues and covering the entire length of the protein have been produced. Antibodies to h-MBP (anti-MBP) were found to be neutralized by the synthetic peptides, in vitro, which span the h-MBP from about amino acid residue 61 to about amino acid residue 106. The peptides, which cover both the amino (about residues 1 to 63) and carboxy (about residues 117 to 162) terminals of h-MBP did not neutralize purified anti-MBP. Intrathecal administration of peptide MBP(75-95), MBP(86-95), or MBP(82-98) produced complete binding-neutralization of free (F) anti-MBP with no change in bound (B) levels. A control peptide MBP35-58 had no effect on F or B anti-MBP levels. I.v. administration of MBP(75-95), MBP(86-95), or MBP(82-98) resulted in significant decline of F and B CSF anti-MBP levels. Administration of MBP synthetic peptides to **MS** patients either intrathecally or i.v. did not have any adverse neurol. effects and systemic complications did not occur. The MBP epitope for **MS** anti-MBP has been localized to an area between amino acid 86 and amino acid 95.
IN Warren, Kenneth G.; Catz, Ingrid

L18 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2002 ACS
TI Peptide fragments of myelin basic protein in the treatment of multiple **sclerosis**
SO PCT Int. Appl., 75 pp.
CODEN: PIXXD2
AB Human myelin basic protein (h-MBP) has a mol. wt. of 18.5 kDa and contains 170 amino acid residues. Synthetic peptides ranging in length from about 8 to 25 residues and covering the entire length of the protein have been produced. Antibodies to h-MBP (anti-MBP) were neutralized by the synthetic peptides, in vitro, which span the h-MBP from about amino acid residue 61 to about amino acid residue 106. The peptides, which cover both the amino (about residues 1 to 63) and carboxy (about residues 117 to 162) terminals of h-MBP did not neutralize purified anti-MBP. Intrathecal administration of peptide MBP(75-95), MBP(86-95), or MBP(82-98) produced complete binding-neutralization of free (F) anti-MBP with no change in bound (B) levels. A control peptide MBP35-58 had no effect on (F) or (B) anti-MBP levels. The i.v. administration of MBP(75-95), MBP(86-95), or MBP(82-98) resulted in significant decline of (F) and (B) CSF anti-MBP levels. Administration of MBP synthetic peptides to **MS** patients either intrathecally or i.v. did not have any adverse neurol. effects and systemic complications did not occur. The MBP epitope for **MS**

anti-MBP was localized to an area between Pro86 and Pro95.

IN Warren, Kenneth G.; Catz, Ingrid

L18 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2002 ACS
TI Short peptide-based tolerogens without self-antigenic or pathogenic activity reverse autoimmune disease
SO Journal of Immunology (1998), 160(10), 5188-5194
CODEN: JOIMA3; ISSN: 0022-1767
AB An immunodominant epitope of myelin basic protein (MBP), VHFFKNIVTPRTP (p87-99), is a major target of T cells in brain lesions of multiple **sclerosis** (**MS**), and this peptide can trigger exptl. autoimmune encephalomyelitis (EAE). The authors designed truncated peptides based on this pathogenic 13-mer that are not antigenic. These short peptides reduced prodn. of IFN-.gamma. and TNF-.alpha. in vivo. Moreover, paraplegic rats given the 7-mer FKNIVTP in sol. form showed total reversal of paralysis in 24 h. Truncated peptides that are too small to stimulate antigenic responses to pathogenic regions of myelin basic protein are nevertheless effective tolerogens and are able to anergize autoreactive T cells. Short peptide-based tolerogens, devoid of immunogenic and pathogenic potential, may be attractive for therapy of autoimmune diseases.
AU Karin, Nathan; Binah, Ofer; Grabie, Nir; Mitchell, Dennis J.; Felzen, Bella; Solomon, Matthew D.; Conlon, Paul; Gaur, Amitabh; Ling, Nicholas; Steinman, Lawrence

L18 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2002 ACS
TI Myelin basic protein peptides for treatment of multiple **sclerosis** patients
SO PCT Int. Appl., 52 pp.
CODEN: PIXXD2
AB Peptides R1-Val-His-Phe-Phe-Lys-Asn-Ile-R2 (R1,R2=H, OH, amino acid, peptide; R1.noteq.R2=H,OH) derived from myelin basic protein, which are capable of neutralizing or modulating prodn. of anti-myelin basic protein antibodies, are claimed. These peptides may be used in treatment of multiplex **sclerosis**. Human myelin basic protein (h-MBP) has a mol. wt. of 18.5 KD and contains 170 amino acid residues. Synthetic peptides ranging in length from about 8 to 25 residues and covering the entire length of the protein have been produced. Antibodies to h-MBP (anti-MBP) were found to be neutralized by the synthetic peptides, in vitro, which span the h-MBP from about amino acid residue 61 to about amino acid residue 106. The peptides, which cover both the amino (about residues 1 to 63) and carboxy (about residues 117 to 162) terminals of h-MBP did not neutralize purified anti-MBP. Intrathecal administration of peptide MBP75-95, either as a single dose, or as repeated injections for periods up to 10 wk, produced complete binding-neutralization of free (F) anti-MBP with no change in bound (B) levels. A control peptide MBP35-58 had no effect on F or B anti-MBP levels. I.v. administration of MBP75-95 resulted in significant decline of F and B CSF anti-MBP levels over a period of one month. Administration of MBP synthetic peptides to **MS** patients either intrathecally or i.v. did not have any adverse neurol. effects and systemic complications did not occur. The MBP epitope for **MS** anti-MBP has been localized to an area between Pro85 and Pro96.
IN Warren, Kenneth G.; Catz, Ingrid

L18 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2002 ACS
TI Fine specificity of the antibody response to myelin basic protein in the central nervous system in multiple **sclerosis**: the minimal B-cell epitope and a model of its features
SO Proceedings of the National Academy of Sciences of the United States of America (1995), 92(24), 11061-5

09921880

CODEN: PNASA6; ISSN: 0027-8424

AB T cells, B cells, and antibody are found in the white matter of the central nervous system in multiple **sclerosis**. The epitope center for the antibody response to human myelin basic protein (MBP) fits precisely the minimal epitope Pro85-Val-Val-His-Phe-Phe-Lys-Asn-Ile-Val-Thr-Pro96 for that reported for HLA DR2b (DRB1*1501)-restricted T cells that recognize MBP and overlaps with the reported DR2a-restricted epitope for T cells reactive to MBP. The authors describe a mol. model of this epitope.

AU Warren, K. G.; Catz, Ingrid; Steinman, Lawrence

L18 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2002 ACS

TI Increased synthetic peptide specificity of tissue-CSF bound anti-MBP in multiple **sclerosis**

SO Journal of Neuroimmunology (1993), 43(1-2), 87-96
CODEN: JNRIDW; ISSN: 0165-5728

AB Free and bound hydrosol. protein exts. were prepd. from 4 anatomical areas of a multiple **sclerosis** (**MS**) cerebrum and from corresponding anatomical areas of a normal (non-**MS**) control. Increased levels of IgG and anti-myelin basic protein antibodies (anti-MBP) were detected in all **MS** samples and they were undetectable in the controls. IgG and anti-MBP from free (unbound) hydrosol. protein exts. are defined as free IgG and free anti-MBP, while IgG and anti-MBP from tissue bound protein exts. are defined as bound IgG and bound anti-MBP. IgG was purified from free protein exts. by protein G Sepharose affinity chromatog. and anti-MBP was further isolated from purified IgG by antigen specific (MBP) Sepharose affinity chromatog. Free and bound anti-MBP were reacted with 20 synthetic peptides of human MBP prepd. by the Fmoc method. Free anti-MBP, whether in the context of whole protein exts., or as purified IgG or as purified antibody, was completely neutralized by peptides #12, #15, #56, and #56* contg. overall residues 75-106, partially neutralized by peptides #27, #16, and #21 contg. overall residues 61-83, and did not react with the remaining 13 peptides. Tissue bound anti-MBP was completely neutralized only by peptides #12, #15, #56, and #56* (overall residues 75-106) and showed no reactivity towards the remaining 16 peptides, including peptides #27, #16, and #21. Synthetic peptide specificity of free anti-MBP purified from **MS** cerebrum was identical to previously reported specificity of free anti-MBP from **MS** cerebrospinal fluid (CSF), while tissue bound anti-MBP, as well as bound anti-MBP from CSF, had a more restricted synthetic peptide specificity than free anti-MBP. Thus, the most likely epitope of anti-MBP is located between residues 84 and 95 of human MBP just proximal to the tri-proline sequence (99-101).

AU Warren, Kenneth G.; Catz, Ingrid

L18 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2002 ACS

TI Synthetic peptide specificity of anti-myelin basic protein from multiple **sclerosis** cerebrospinal fluid

SO PCT Int. Appl., 25 pp.
CODEN: PIXXD2

AB Human myelin basic protein (hMBP) has a mol. wt. of 18.5 kDa and contains 170 amino acid residues. Synthetic peptides of 8-25 residues and covering the entire length of the protein have been produced. Anti-hMBP antibodies (isolated from cerebrospinal fluid from multiple **sclerosis** patients) were neutralized by peptides spanning the hMBP region of approx. residue 61 to approx. residue 106. Peptides representing amino- (approx. residues 1-63) and carboxyl-terminal (approx. residues 117-162) regions of hMBP did not neutralize the purified anti-hMBP antibodies. Intrathecal administration of selected synthetic MBP peptides may be used as a treatment for multiple **sclerosis** by neutralizing the anti-MBP antibodies. Amino acid sequences of reactive peptides are included.

09921880

IN Warren, Kenneth G.; Catz, Ingrid

L18 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2002 ACS
TI Synthetic peptide specificity of anti-myelin basic protein from multiple **sclerosis** cerebrospinal fluid
SO J. Neuroimmunol. (1992), 39(1-2), 81-9
CODEN: JNRIDW; ISSN: 0165-5728
AB Human myelin basic protein (h-MBP) purified from central nervous system (CNS) myelin has a mol. mass of 18.5 kDa and 170 residues. Eighteen synthetic peptides ranging from 8 to 25 residues and covering the length of h-MBP were prepd. by the Fmoc method. Antibodies to h-MBP (anti-MBP) were isolated and purified from cerebrospinal fluid (CSF) of patients with multiple **sclerosis** (**MS**) by two-step affinity chromatog. Purified anti-MBP was reacted with increasing amts. of h-MBP as well as each of the 18 synthetic peptides in an initial liq. phase assay, and then titers of free anti-MBP in the resulting mixts. were detd. by a solid phase RIA. Purified anti-MBP was neutralized by h-MBP and 6 of the 18 synthetic peptides used in this study. The antibody was completely neutralized by peptides No. 12 (residues: 80-97), No. 15 (residues: 91-106) and No. 56 (residues: 75-95) and was partially neutralized by peptides No. 27 (residues: 61-75), No. 16 (residues: 64-78) and No. 21 (residues: 69-83). The 12 remaining synthetic peptides covering both the N- (residues 1-63) and C- (residues 117-162) terminals of h-MBP did not neutralize purified anti-MBP. These results suggest that anti-MBP purified from CSF of patients with **MS** have affinity for discontinuous epitopes located between residues 61 and 106 on the h-MBP mol. Alternatively anti-MBP may be polyspecific recognizing different amino acid sequences.
AU Warren, Kenneth G.; Catz, Ingrid

=> d hist

(FILE 'HOME' ENTERED AT 16:23:09 ON 20 SEP 2002)

FILE 'REGISTRY, DGENE' ENTERED AT 16:24:05 ON 20 SEP 2002

FILE 'REGISTRY, DGENE' ENTERED AT 16:24:16 ON 20 SEP 2002

FILE 'REGISTRY' ENTERED AT 16:28:10 ON 20 SEP 2002
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L3 15 S L2 AND PD<=20010320
L4 15 DUP REM L3 (0 DUPLICATES REMOVED)

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L15 1 S PVVHFFKNIV/SQEP
L16 1 S VVHFFKNIVT/SQEP

09921880

L17 2 S VHFFKNIVTP/SQEP

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L19 8 DUP REM L18 (0 DUPLICATES REMOVED)
L20 8 S L18 AND PD<=20010320

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NEWS 10	Jun 10	MEDLINE Reload
NEWS 11	Jun 10	PCTFULL has been reloaded
NEWS 12	Jul 02	FOREGE no longer contains STANDARDS file segment
NEWS 13	Jul 22	USAN to be reloaded July 28, 2002; saved answer sets no longer valid
NEWS 14	Jul 29	Enhanced polymer searching in REGISTRY
NEWS 15	Jul 30	NETFIRST to be removed from STN
NEWS 16	Aug 08	CANCERLIT reload
NEWS 17	Aug 08	PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 18	Aug 08	NTIS has been reloaded and enhanced
NEWS 19	Aug 19	Aquatic Toxicity Information Retrieval (AQUIRE) now available on STN
NEWS 20	Aug 19	IFIPAT, IFICDB, and IFIUDB have been reloaded
NEWS 21	Aug 19	The MEDLINE file segment of TOXCENTER has been reloaded
NEWS 22	Aug 26	Sequence searching in REGISTRY enhanced
NEWS 23	Sep 03	JAPIO has been reloaded and enhanced
NEWS 24	Sep 16	Experimental properties added to the REGISTRY file
NEWS 25	Sep 16	Indexing added to some pre-1967 records in CA/CAPLUS
NEWS 26	Sep 16	CA Section Thesaurus available in CAPLUS and CA
NEWS EXPRESS		February 1 CURRENT WINDOWS VERSION IS V6.0d, CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP), AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002
NEWS HOURS		STN Operating Hours Plus Help Desk Availability

08/03/01

09921880

NEWS INTER General Internet Information
NEWS LOGIN Welcome Banner and News Items
NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 15:25:08 ON 24 SEP 2002

=>

---Logging off of STN---

=>
Executing the logoff script...

=> LOG Y

	SINCE FILE ENTRY	TOTAL SESSION
COST IN U.S. DOLLARS		
FULL ESTIMATED COST	0.21	0.21

STN INTERNATIONAL LOGOFF AT 15:25:53 ON 24 SEP 2002

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssspta1653sxs

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2	Apr 08	"Ask CAS" for self-help around the clock
NEWS	3	Apr 09	BEILSTEIN: Reload and Implementation of a New Subject Area
NEWS	4	Apr 09	ZDB will be removed from STN
NEWS	5	Apr 19	US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
NEWS	6	Apr 22	Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS

08/03/01

09921880

NEWS 7 Apr 22 BIOSIS Gene Names now available in TOXCENTER
NEWS 8 Apr 22 Federal Research in Progress (FEDRIP) now available
NEWS 9 Jun 03 New e-mail delivery for search results now available
NEWS 10 Jun 10 MEDLINE Reload
NEWS 11 Jun 10 PCTFULL has been reloaded
NEWS 12 Jul 02 FOREGE no longer contains STANDARDS file segment
NEWS 13 Jul 22 USAN to be reloaded July 28, 2002;
saved answer sets no longer valid
NEWS 14 Jul 29 Enhanced polymer searching in REGISTRY
NEWS 15 Jul 30 NETFIRST to be removed from STN
NEWS 16 Aug 08 CANCERLIT reload
NEWS 17 Aug 08 PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 18 Aug 08 NTIS has been reloaded and enhanced
NEWS 19 Aug 19 Aquatic Toxicity Information Retrieval (AQUIRE)
now available on STN
NEWS 20 Aug 19 IFIPAT, IFICDB, and IFIUDB have been reloaded
NEWS 21 Aug 19 The MEDLINE file segment of TOXCENTER has been reloaded
NEWS 22 Aug 26 Sequence searching in REGISTRY enhanced
NEWS 23 Sep 03 JAPIO has been reloaded and enhanced
NEWS 24 Sep 16 Experimental properties added to the REGISTRY file
NEWS 25 Sep 16 Indexing added to some pre-1967 records in CA/CAPLUS
NEWS 26 Sep 16 CA Section Thesaurus available in CAPLUS and CA

NEWS EXPRESS February 1 CURRENT WINDOWS VERSION IS V6.0d,
CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),
AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002 .
NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS INTER General Internet Information
NEWS LOGIN Welcome Banner and News Items
NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

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All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 15:38:47 ON 24 SEP 2002

=> FIL REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 15:39:08 ON 24 SEP 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

08/03/01

09921880

STRUCTURE FILE UPDATES: 23 SEP 2002 HIGHEST RN 454421-17-1
DICTIONARY FILE UPDATES: 23 SEP 2002 HIGHEST RN 454421-17-1

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP
PROPERTIES for more information. See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

```
=> s 8-25/sql and protein?/fs
       1489926 8-25/SQL
       1640451 PROTEIN?/FS
L1      327538 8-25/SQL AND PROTEIN?/FS

=> s 8-27/sql and protein?/fs
       1560314 8-27/SQL
       1640451 PROTEIN?/FS
L2      337465 8-27/SQL AND PROTEIN?/FS

=> s (HHPARTAH)|(HPARTAHY)|(PARTAHYG)|(ARTAHYGS)|(RTAHYGSL)|(TAHYGSLP)|(AHYGSLPQ)/sqsp
L3           59 (HHPARTAH)|(HPARTAHY)|(PARTAHYG)|(ARTAHYGS)|(RTAHYGSL)|(TAHYGSLP
               )|(AHYGSLPQ)/SQSP

=> s
(HYGSLPQK)|(YGSLPQKS)|(GSLPQKSH)|(SLPQKSHG)|(RTQDENPV)|(TQDENPVV)|(QDENPVVH)|(DENPVVHF)/sq
sp
L4          253 (HYGSLPQK)|(YGSLPQKS)|(GSLPQKSH)|(SLPQKSHG)|(RTQDENPV)|(TQDENPVV
               )|(QDENPVVH)|(DENPVVHF)/SQSP

=> s
(ENPVVHFF)|(NPVVHFFK)|(PVVHFFKN)|(VVHFFKNI)|(VHFFKNIV)|(HFFKNIVT)|(FFKNIVTP)|(FKNIVTPR)/sq
sp
L5          378 (ENPVVHFF)|(NPVVHFFK)|(PVVHFFKN)|(VVHFFKNI)|(VHFFKNIV)|(HFFKNIVT
               )|(FFKNIVTP)|(FKNIVTPR)/SQSP

=> s
(KNIVTPRT)|(NIVTPRTP)|(IVTPRTPP)|(VTPRTPPP)|(TPRTPPPS)|(PRTPPPSQ)|(RTPPPSQG)|(TPPPSQGK)|(P
PPSQGKG)/SQSP
L6          284 (KNIVTPRT)|(NIVTPRTP)|(IVTPRTPP)|(VTPRTPPP)|(TPRTPPPS)|(PRTPPPSQ
               )|(RTPPPSQG)|(TPPPSQGK)|(PPPSQGKG)/SQSP

=> s l3 or l4 or l5 or l6
L7          592 L3 OR L4 OR L5 OR L6

=> s l7 and pd<=19911021
         94918 PD<=19911021
L8           0 L7 AND PD<=19911021

=> FIL BIOSIS MEDLINE CAPLUS EMBASE SCISEARCH                  SINCE FILE      TOTAL
COST IN U.S. DOLLARS                                             ENTRY    SESSION
                                                                132.08     132.29

FULL ESTIMATED COST

FILE 'BIOSIS' ENTERED AT 15:48:26 ON 24 SEP 2002
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08/03/01

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FILE 'MEDLINE' ENTERED AT 15:48:26 ON 24 SEP 2002

FILE 'CAPLUS' ENTERED AT 15:48:26 ON 24 SEP 2002
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FILE 'SCISEARCH' ENTERED AT 15:48:26 ON 24 SEP 2002
COPYRIGHT (C) 2002 Institute for Scientific Information (ISI) (R)

=> s 13 or 14 or 15 or 16
MISSING OPERATOR HHPARTAH)|(HPARTAHY
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> s 17
MISSING OPERATOR HHPARTAH)|(HPARTAHY
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> s 17 and ms
MISSING OPERATOR HHPARTAH)|(HPARTAHY
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> s 17 and patent/dt
MISSING OPERATOR HHPARTAH)|(HPARTAHY
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	174.53	306.82

FILE 'CAPLUS' ENTERED AT 15:52:52 ON 24 SEP 2002
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FILE COVERS 1907 - 24 Sep 2002 VOL 137 ISS 13
FILE LAST UPDATED: 23 Sep 2002 (20020923/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

09921880

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

```
=> s l7 and patent/dt
          379 L7
      3934800 PATENT/DT
L9          91 L7 AND PATENT/DT

=> s l9 and pd<=19911021
     14042230 PD<=19911021
                (PD<=19911021)
L10          4 L9 AND PD<=19911021

=> d l10 1-4 so ti ab au
```

L10 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2002 ACS
SO U.S., 47 pp. Cont.-in-part of U.S. 5,260.422.
CODEN: USXXAM
TI MHC class II-peptide conjugates useful in ameliorating autoimmunity
AB A novel method for treating autoimmune diseases uses a reagent which attacks only the cells of the immune system which are responsive to the autoantigen. The reagent is an MHC class II protein complex with an antigenic peptide, where the peptide comprises an epitope recognized by a T-cell specifically recognized by an autoantigen. Suitable autoimmune disease-assocd. autoantigens include myelin basic protein (in multiple sclerosis), acetylcholine receptor (in myasthenia gravis), and type II collagen (in rheumatoid arthritis). The MHC class II component has an antigen-binding pocket to which the autoantigenic peptide is bound so that the peptide is recognized by, and regulates the function of, the target T-cell. The complex may further include a radioisotope or other label for diagnostic purposes, or a toxin or other substance for therapeutic utility. Thus, a complex of mouse I-Ak with synthetic rat myelin basic protein peptide Ac-ASQKRPSQRHGSK was used to down-regulate T-cells from mice immunized against myelin basic protein, resulting in induction of nonresponsiveness or anergy.
IN Sharma, Somesh D.; Clark, Brian R.; Lerch, Bernard L.

L10 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2002 ACS
SO PCT Int. Appl., 47 pp.
CODEN: PIXXD2
TI Multiple sclerosis (MS) T-cell receptor for diagnosis and treatment of MS
AB Peptides of a portion of the T-cell receptor for an antigen that activates human immune response against myelin basic proteins (MBP) are useful as immunogens and in treatment of the symptoms of MS. A vaccine comprises attenuated VB17+ or VB12+ human T-cells from a human subject diagnosed with MS. Kits for diagnosing MS comprise nucleotide sequences encoding VB12, VB17, or complementary sequences. Amino acid residues 84-102 of human MBP are the immunodominant region recognized by a majority of peripheral T-cells isolated from MS patients. T-cells reacting with this epitope often also possessed the MHC class II haplotype DR2 gene. The MS T-cell lines predominantly used the VB17 or VB12 gene segments.
IN Wucherpfenning, Kai W.; Weiner, Howard L.; Hafler, David Allen

L10 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2002 ACS
SO Neth. Appl., 42 pp.
CODEN: NAXXAN
TI Pharmaceutical mixture for suppression and diagnosis of multiple sclerosis
AB Synthetic peptides contg. certain glutamine-contg. sequences are inhibitors of exptl. allergic encephalomyelitis (EAE) in lab. animals, a

model for human multiple sclerosis. Injected s.c., these peptides evoke a delayed hypersensitivity reaction in subjects with the disease, and are thus useful for diagnosis. EAE and autoimmune disease, was evoked in control guinea pigs by s.c. injection of 25 .mu.g Phe-Ser-Trp-Gly-Ala-Glu-Gly-Gln-Lys (I) [29705-91-7], a hydrolysis product of the myelin protein of the central nervous system, together with complete Freund's adjuvant. Induction of EAE was prevented in a 2nd group of I-treated guinea pigs by injection of Gly-Gly-Trp-(Gly)4-Gln-Lys [55203-17-3] (250 .mu.g/day s.c. for 14 days, beginning 0 or 7 days after injection of I). The synthetic peptides were prepd. by the Merrifield solid-phase method.

L10 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2002 ACS
SO U.S., 6 pp.
CODEN: USXXAM
TI Antidisease-producing synthetic materials for the prevention suppression and diagnosis of multiple sclerosis
AB The synthetic peptide, H-Gly-Gly-Trp-Gly-Gly-Gly-Gly-Gln-Lys-OH [55203-17-3] (25-1500 .mu.g), prevented allergic encephalomyelitis (EAE) induced by similar peptides in lab. animals. Since EAE is a model for multiple sclerosis in man, the peptide may be useful in prevention or diagnosis.
IN Hashim, George A.

=> d l10 1-4 so ti ab au pn

L10 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2002 ACS
SO U.S., 47 pp. Cont.-in-part of U.S. 5,260.422.
CODEN: USXXAM
TI MHC class II-peptide conjugates useful in ameliorating autoimmunity
AB A novel method for treating autoimmune diseases uses a reagent which attacks only the cells of the immune system which are responsive to the autoantigen. The reagent is an MHC class II protein complex with an antigenic peptide, where the peptide comprises an epitope recognized by a T-cell specifically recognized by an autoantigen. Suitable autoimmune disease-assocd. autoantigens include myelin basic protein (in multiple sclerosis), acetylcholine receptor (in myasthenia gravis), and type II collagen (in rheumatoid arthritis). The MHC class II component has an antigen-binding pocket to which the autoantigenic peptide is bound so that the peptide is recognized by, and regulates the function of, the target T-cell. The complex may further include a radioisotope or other label for diagnostic purposes, or a toxin or other substance for therapeutic utility. Thus, a complex of mouse I-Ak with synthetic rat myelin basic protein peptide Ac-ASQKRPSQRHGSK was used to down-regulate T-cells from mice immunized against myelin basic protein, resulting in induction of nonresponsiveness or anergy.
IN Sharma, Somesh D.; Clark, Brian R.; Lerch, Bernard L.

	PATENT NO.	KIND	DATE	
PI	US 5468481	A	19951121	
	US 5194425	A	19930316	
	WO 8912459	A1	19891228	<--
	AU 8939638	A1	19900112	<--
	EP 423201	A1	19910424	<--
	EP 423201	B1	19960612	
	JP 03505731	T2	19911212	
	JP 2755458	B2	19980520	
	AT 139122	E	19960615	
	EP 742014	A1	19961113	
	CA 1340327	A1	19990119	
	US 5130297	A	19920714	

US 5284935	A	19940208
US 5260422	A	19931109
AU 9219144	A1	19921117
US 6106840	A	20000822
US 6451314	B1	20020917

L10 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2002 ACS
SO PCT Int. Appl., 47 pp.
CODEN: PIXXD2
TI Multiple sclerosis (MS) T-cell receptor for diagnosis and treatment of MS
AB Peptides of a portion of the T-cell receptor for an antigen that activates human immune response against myelin basic proteins (MBP) are useful as immunogens and in treatment of the symptoms of MS. A vaccine comprises attenuated VB17+ or VB12+ human T-cells from a human subject diagnosed with MS. Kits for diagnosing MS comprise nucleotide sequences encoding VB12, VB17, or complementary sequences. Amino acid residues 84-102 of human MBP are the immunodominant region recognized by a majority of peripheral T-cells isolated from MS patients. T-cells reacting with this epitope often also possessed the MHC class II haplotype DR2 gene. The MS T-cell lines predominantly used the VB17 or VB12 gene segments.
IN Wucherpfenning, Kai W.; Weiner, Howard L.; Hafler, David Allen

	PATENT NO.	KIND	DATE	
PI	WO 9115225	A1	19911017	<--
	CA 2078549	AA	19911001	<--
	AU 9178989	A1	19911030	
	AU 651350	B2	19940721	
	EP 522091	A1	19930113	
	EP 522091	B1	20011212	
	BR 9106303	A	19930413	
	HU 63334	A2	19930830	
	HU 217847	B	20000428	
	JP 05507911	T2	19931111	
	AT 210721	E	20011215	
	ES 2169021	T3	20020701	
	NO 9203778	A	19921116	
	US 5858980	A	19990112	
	US 6036957	A	20000314	
	US 6077509	A	20000620	

L10 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2002 ACS
SO Neth. Appl., 42 pp.
CODEN: NAXXAN
TI Pharmaceutical mixture for suppression and diagnosis of multiple sclerosis
AB Synthetic peptides contg. certain glutamine-contg. sequences are inhibitors of exptl. allergic encephalomyelitis (EAE) in lab. animals, a model for human multiple sclerosis. Injected s.c., these peptides evoke a delayed hypersensitivity reaction in subjects with the disease, and are thus useful for diagnosis. EAE and autoimmune disease, was evoked in control guinea pigs by s.c. injection of 25 .mu.g Phe-Ser-Trp-Gly-Ala-Glu-Gly-Gln-Lys (I) [29705-91-7], a hydrolysis product of the myelin protein of the central nervous system, together with complete Freund's adjuvant. Induction of EAE was prevented in a 2nd group of I-treated guinea pigs by injection of Gly-Gly-Trp-(Gly)4-Gln-Lys [55203-17-3] (250 .mu.g/day s.c. for 14 days, beginning 0 or 7 days after injection of I). The synthetic peptides were prepd. by the Merrifield solid-phase method.

	PATENT NO.	KIND	DATE	
PI	NL 7600523	A	19760722	<--
	US 4113858	A	19780912	<--
	GB 1528336	A	19781011	<--

			<--
CH 614698	A	19791214	<--
IL 48862	A1	19801231	<--
BE 837741	A1	19760514	<--
FR 2297633	A1	19760813	
FR 2297633	B1	19790223	<--
ZA 7600308	A	19770126	<--
CA 1092600	A1	19801230	

L10 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2002 ACS
SO U.S., 6 pp.
CODEN: USXXAM
TI Antidisease-producing synthetic materials for the prevention suppression and diagnosis of multiple sclerosis
AB The synthetic peptide, H-Gly-Gly-Trp-Gly-Gly-Gly-Gly-Gln-Lys-OH [55203-17-3] (25-1500 .mu.g), prevented allergic encephalomyelitis (EAE) induced by similar peptides in lab. animals. Since EAE is a model for multiple sclerosis in man, the peptide may be useful in prevention or diagnosis.
IN Hashim, George A.

PATENT NO.	KIND	DATE	
			<--
PI US 3864481	A	19750204	<--
US 4113858	A	19780912	<--
US 4230696	A	19801028	

=> fil medline

	SINCE FILE ENTRY	TOTAL SESSION
COST IN U.S. DOLLARS		
FULL ESTIMATED COST	23.55	330.37
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-4.96	-4.96

FILE 'MEDLINE' ENTERED AT 15:56:07 ON 24 SEP 2002

FILE LAST UPDATED: 21 SEP 2002 (20020921/UP). FILE COVERS 1958 TO DATE.

On June 9, 2002, MEDLINE was reloaded. See HELP RLOAD for details.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2002 vocabulary. Enter HELP THESAURUS for details.

THIS FILE CONTAINS CAS REGISTRY NUMBERS FOR EASY AND ACCURATE SUBSTANCE IDENTIFICATION.

=> s l7 and pd<=19911021
'19911021' NOT A VALID FIELD CODE
0 L7
0 PD<=19911021
L11 0 L7 AND PD<=19911021

=> s l7 and py<=1991
0 L7
8209012 PY<=1991
L12 0 L7 AND PY<=1991

=> FIL BIOSIS MEDLINE CAPLUS EMBASE

	SINCE FILE ENTRY	TOTAL SESSION
COST IN U.S. DOLLARS		

```
FULL ESTIMATED COST                                    24.06      354.43

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)        SINCE FILE      TOTAL
                                                     ENTRY      SESSION
CA SUBSCRIBER PRICE                                   0.00       -4.96

FILE 'BIOSIS' ENTERED AT 15:56:57 ON 24 SEP 2002
COPYRIGHT (C) 2002 BIOLOGICAL ABSTRACTS INC.(R)

FILE 'MEDLINE' ENTERED AT 15:56:57 ON 24 SEP 2002

FILE 'CAPLUS' ENTERED AT 15:56:57 ON 24 SEP 2002
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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE 'EMBASE' ENTERED AT 15:56:57 ON 24 SEP 2002
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=> s l7 and py<=1991
   1 FILES SEARCHED...
   3 FILES SEARCHED...
L13         105 L7 AND PY<=1991

=> dup rem 13
DUPLICATE IS NOT AVAILABLE IN 'REGISTRY'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
COST IN U.S. DOLLARS                              SINCE FILE      TOTAL
                                                     ENTRY      SESSION
FULL ESTIMATED COST                                  46.56      400.99

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)        SINCE FILE      TOTAL
                                                     ENTRY      SESSION
CA SUBSCRIBER PRICE                                   0.00       -4.96

FILE 'REGISTRY' ENTERED AT 16:04:25 ON 24 SEP 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   23 SEP 2002  HIGHEST RN 454421-17-1
DICTIONARY FILE UPDATES:  23 SEP 2002  HIGHEST RN 454421-17-1

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available.  See HELP
PROPERTIES for more information.  See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf
PROCESSING COMPLETED FOR L3
L14          59 DUP REM L3 (0 DUPLICATES REMOVED)

=> dup rem l13
```

09921880

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.38	401.37

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-4.96

FILE 'CAPLUS' ENTERED AT 16:04:56 ON 24 SEP 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 24 Sep 2002 VOL 137 ISS 13
FILE LAST UPDATED: 23 Sep 2002 (20020923/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.
PROCESSING COMPLETED FOR L13
L15 103 DUP REM L13 (2 DUPLICATES REMOVED)

```
=> s l15 and sclerosis
L16          103 S L15
           14141 SCLEROSIS
              27 SCLEROSES
           14160 SCLEROSIS
                 (SCLEROSIS OR SCLEROSES)
L17           14 L16 AND SCLEROSIS

=> d 1-14 pd au ti so ab pn
'PD' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

The following are valid formats:

ABS --------- GI and AB
ALL --------- BIB, AB, IND, RE
APPS -------- AI, PRAI
BIB --------- AN, plus Bibliographic Data and PI table (default)
CAN --------- List of CA abstract numbers without answer numbers
CBIB -------- AN, plus Compressed Bibliographic Data
DALL -------- ALL, delimited (end of each field identified)
DMAX -------- MAX, delimited for post-processing
FAM --------- AN, PI and PRAI in table, plus Patent Family data
FBIB -------- AN, BIB, plus Patent FAM
IND --------- Indexing data
```

09921880

IPC --------- International Patent Classifications
MAX --------- ALL, plus Patent FAM, RE
PATS -------- PI, SO
SAM --------- CC, SX, TI, ST, IT
SCAN -------- CC, SX, TI, ST, IT (random display, no answer numbers;
SCAN must be entered on the same line as the DISPLAY,
e.g., D SCAN or DISPLAY SCAN)
STD --------- BIB, IPC, and NCL

IABS -------- ABS, indented with text labels
IALL -------- ALL, indented with text labels
IBIB -------- BIB, indented with text labels
IMAX -------- MAX, indented with text labels
ISTD -------- STD, indented with text labels

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

HIT --------- Fields containing hit terms
HITIND ------ IC, ICA, ICI, NCL, CC and index field (ST and IT)
containing hit terms
HITRN ------- HIT RN and its text modification
HITSTR ------ HIT RN, its text modification, its CA index name, and
its structure diagram
HITSEQ ------ HIT RN, its text modification, its CA index name, its
structure diagram, plus NTE and SEQ fields
FHITSTR ----- First HIT RN, its text modification, its CA index name, and
its structure diagram
FHITSEQ ----- First HIT RN, its text modification, its CA index name, its
structure diagram, plus NTE and SEQ fields
KWIC -------- Hit term plus 20 words on either side
OCC --------- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field codes. For a list of the display field codes, enter HELP DFIELDS at an arrow prompt (=>). Examples of formats include: TI; TI,AU; BIB,ST; TI,IND; TI,SO. You may specify the format fields in any order and the information will be displayed in the same order as the format specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR, FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC to view a specified Accession Number.
ENTER DISPLAY FORMAT (BIB):d 1-14 py au ti so ab pn
'D' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'
'1-14' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

The following are valid formats:

ABS --------- GI and AB
ALL --------- BIB, AB, IND, RE
APPS -------- AI, PRAI
BIB --------- AN, plus Bibliographic Data and PI table (default)
CAN --------- List of CA abstract numbers without answer numbers
CBIB -------- AN, plus Compressed Bibliographic Data
DALL -------- ALL, delimited (end of each field identified)
DMAX -------- MAX, delimited for post-processing
FAM --------- AN, PI and PRAI in table, plus Patent Family data

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FBIB -------- AN, BIB, plus Patent FAM
IND --------- Indexing data
IPC --------- International Patent Classifications
MAX --------- ALL, plus Patent FAM, RE
PATS -------- PI, SO
SAM --------- CC, SX, TI, ST, IT
SCAN -------- CC, SX, TI, ST, IT (random display, no answer numbers;
SCAN must be entered on the same line as the DISPLAY,
e.g., D SCAN or DISPLAY SCAN)
STD --------- BIB, IPC, and NCL

IABS -------- ABS, indented with text labels
IALL -------- ALL, indented with text labels
IBIB -------- BIB, indented with text labels
IMAX -------- MAX, indented with text labels
ISTD -------- STD, indented with text labels

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

HIT --------- Fields containing hit terms
HITIND ------ IC, ICA, ICI, NCL, CC and index field (ST and IT)
containing hit terms
HITRN ------- HIT RN and its text modification
HITSTR ------ HIT RN, its text modification, its CA index name, and
its structure diagram
HITSEQ ------ HIT RN, its text modification, its CA index name, its
structure diagram, plus NTE and SEQ fields
FHITSTR ----- First HIT RN, its text modification, its CA index name, and
its structure diagram
FHITSEQ ----- First HIT RN, its text modification, its CA index name, its
structure diagram, plus NTE and SEQ fields
KWIC -------- Hit term plus 20 words on either side
OCC --------- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field codes. For a list of the display field codes, enter HELP DFIELDS at an arrow prompt (=>). Examples of formats include: TI; TI,AU; BIB,ST; TI,IND; TI,SO. You may specify the format fields in any order and the information will be displayed in the same order as the format specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR, FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC to view a specified Accession Number.
ENTER DISPLAY FORMAT (BIB):
ENTER DISPLAY FORMAT (BIB):
ENTER DISPLAY FORMAT (BIB):exit
'EXIT' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

The following are valid formats:

ABS --------- GI and AB
ALL --------- BIB, AB, IND, RE
APPS -------- AI, PRAI
BIB --------- AN, plus Bibliographic Data and PI table (default)
CAN --------- List of CA abstract numbers without answer numbers
CBIB -------- AN, plus Compressed Bibliographic Data

DALL -------- ALL, delimited (end of each field identified)
DMAX -------- MAX, delimited for post-processing
FAM --------- AN, PI and PRAI in table, plus Patent Family data
FBIB -------- AN, BIB, plus Patent FAM
IND --------- Indexing data
IPC --------- International Patent Classifications
MAX --------- ALL, plus Patent FAM, RE
PATS -------- PI, SO
SAM --------- CC, SX, TI, ST, IT
SCAN -------- CC, SX, TI, ST, IT (random display, no answer numbers;
SCAN must be entered on the same line as the DISPLAY,
e.g., D SCAN or DISPLAY SCAN)
STD --------- BIB, IPC, and NCL

IABS -------- ABS, indented with text labels
IALL -------- ALL, indented with text labels
IBIB -------- BIB, indented with text labels
IMAX -------- MAX, indented with text labels
ISTD -------- STD, indented with text labels

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

HIT --------- Fields containing hit terms
HITIND ------ IC, ICA, ICI, NCL, CC and index field (ST and IT)
containing hit terms
HITRN ------- HIT RN and its text modification
HITSTR ------ HIT RN, its text modification, its CA index name, and
its structure diagram
HITSEQ ------ HIT RN, its text modification, its CA index name, its
structure diagram, plus NTE and SEQ fields
FHITSTR ----- First HIT RN, its text modification, its CA index name, and
its structure diagram
FHITSEQ ----- First HIT RN, its text modification, its CA index name, its
structure diagram, plus NTE and SEQ fields
KWIC -------- Hit term plus 20 words on either side
OCC --------- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field codes. For a list of the display field codes, enter HELP DFIELDS at an arrow prompt (=>). Examples of formats include: TI; TI,AU; BIB,ST; TI,IND; TI,SO. You may specify the format fields in any order and the information will be displayed in the same order as the format specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR, FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC to view a specified Accession Number.
ENTER DISPLAY FORMAT (BIB):kwic

L17 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2002 ACS
TI Human myelin basic protein epitopes for modulating immune system and for treating multiple **sclerosis**

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002076412	A1	20020620	US 1995-484409	19950607
	WO 9117268	A1	19911114	WO 1991-US2991	19910501 <--
	W: AU, CA, JP				

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE
EP 725277 A2 19960807 EP 1996-100852 19910501
EP 725277 A3 19961204
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE
US 5667967 A 19970916 US 1993-66325 19930521

AB . . . 87-99 of hMBP, as well as residues His-Phe-Phe-Lys and/or Lys-Ile-Phe-Lys of hMBP. The method is esp. useful for treating multiple **sclerosis**.

ST immunomodulator immune tolerance myelin basic protein; human myelin basic protein epitope multiple **sclerosis**

IT Structure-activity relationship
(antigen-binding; human myelin basic protein epitopes for modulating immune system and for treating multiple **sclerosis**)

IT Drug delivery systems
(carriers; human myelin basic protein epitopes for modulating immune system and for treating multiple **sclerosis**)

IT DNA sequences
Epitopes
Human
Immunomodulators
Multiple **sclerosis**
Protein sequences
(human myelin basic protein epitopes for modulating immune system and for treating multiple **sclerosis**)

IT Myelin basic protein
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(human myelin basic protein epitopes for modulating immune system and for treating multiple **sclerosis**)

IT Immune tolerance
(inducer; human myelin basic protein epitopes for modulating immune system and for treating multiple **sclerosis**)

IT **438070-01-0**, Myelin basic protein (human precursor)
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amino acid sequence; human myelin basic protein epitopes for modulating immune system and for treating multiple **sclerosis**)

IT 60998-20-1 115306-15-5 **118506-26-6** 124470-31-1 124470-32-2
158401-73-1 158401-74-2 163350-44-5 438002-44-9
438002-47-2 438002-49-4 438002-51-8 438002-53-0 438002-55-2
438002-57-4 438002-59-6 438002-63-2 438002-65-4 438002-66-5
438002-67-6 438002-68-7 438002-69-8 438002-71-2 438002-72-3
438002-73-4 438002-75-6 438002-77-8 438002-79-0 438002-83-6
438002-85-8 438002-87-0 438002-89-2 438002-91-6 438002-93-8
438002-95-0 438002-96-1 438002-97-2 438069-09-1 438069-10-4
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(human myelin basic protein epitopes for modulating immune system and for treating multiple **sclerosis**)

IT 438070-02-1, DNA (human myelin basic protein cDNA)
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nucleotide sequence; human myelin basic protein epitopes for modulating immune system and for treating multiple **sclerosis**)

IT **158401-69-5 158401-70-8 158401-71-9**
158401-72-0 158401-75-3 158401-76-4 **158401-77-5**
158401-78-6 158401-79-7 158401-80-0
158401-81-1
RL: PRP (Properties)
(unclaimed sequence; human myelin basic protein epitopes for modulating immune system and for treating multiple **sclerosis**)

L17 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2002 ACS

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5468481	A	19951121	US 1992-869293	19920414
	US 5194425	A	19930316	US 1989-367751	19890621
	WO 8912459	A1	19891228	WO 1989-US2784	19890623 <--
	W: AT, AU, BB, BG, BR, CH, DE, DK, FI, GB, HU, JP, KP, KR, LK, LU, MC, MG, MW, NL, NO, RO, SD, SE, SU				
	RW: AT, BE, BF, BJ, CF, CG, CH, CM, DE, FR, GA, GB, IT, LU, ML, MR, NL, SE, SN, TD, TG				
	AU 8939638	A1	19900112	AU 1989-39638	19890623 <--
	EP 423201	A1	19910424	EP 1989-908127	19890623 <--
	EP 423201	B1	19960612		
	R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
	JP 03505731	T2	19911212	JP 1989-507650	19890623 <--
	JP 2755458	B2	19980520		
	AT 139122	E	19960615	AT 1989-908127	19890623
	EP 742014	A1	19961113	EP 1995-117141	19890623
	R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
	CA 1340327	A1	19990119	CA 1989-603841	19890623
	US 5130297	A	19920714	US 1990-576084	19900830
	US 5284935	A	19940208	US 1990-635840	19901228
	US 5260422	A	19931109	US 1991-690840	19910423
	AU 9219144	A1	19921117	AU 1992-19144	19920423
	US 6106840	A	20000822	US 1995-462351	19950605
	US 6451314	B1	20020917	US 2000-602807	20000623

AB . . . epitope recognized by a T-cell specifically recognized by an autoantigen. Suitable autoimmune disease-assocd. autoantigens include myelin basic protein (in multiple **sclerosis**), acetylcholine receptor (in myasthenia gravis), and type II collagen (in rheumatoid arthritis). The MHC class II component has an antigen-binding. . .

IT Autoimmune disease
Immunosuppressants
Multiple **sclerosis**
Myasthenia gravis
(MHC class II-peptide conjugates useful in ameliorating autoimmunity)

IT 145544-95-2D, complexes with MHC class II antigens **145567-17-5D**, complexes with MHC class II antigens **172957-00-5D**, complexes with MHC class II antigens
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(of myelin basic protein; MHC class II-peptide conjugates useful in ameliorating autoimmunity)

L17 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2002 ACS

TI Multiple **sclerosis** (MS) T-cell receptor for diagnosis and treatment of MS

PI WO 9115225 A1 **19911017**

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9115225	A1	19911017	WO 1991-US2218	19910329 <--
	W: AU, BR, CA, DK, FI, HU, JP, KR, NO				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
	CA 2078549	AA	19911001	CA 1991-2078549	19910329 <--
	AU 9178989	A1	19911030	AU 1991-78989	19910329 <--
	AU 651350	B2	19940721		
	EP 522091	A1	19930113	EP 1991-910085	19910329
	EP 522091	B1	20011212		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				

BR 9106303	A	19930413	BR 1991-6303	19910329
HU 63334	A2	19930830	HU 1992-3100	19910329
HU 217847	B	20000428		
JP 05507911	T2	19931111	JP 1991-509347	19910329
AT 210721	E	20011215	AT 1991-910085	19910329
ES 2169021	T3	20020701	ES 1991-910085	19910329
NO 9203778	A	19921116	NO 1992-3778	19920929
US 5858980	A	19990112	US 1995-468540	19950606
US 6036957	A	20000314	US 1995-469640	19950606
US 6077509	A	20000620	US 1995-469648	19950606

ST multiple **sclerosis** T cell receptor peptide; myelin basic protein T cell receptor; vaccine T cell multiple **sclerosis**

IT Antigens
RL: BIOL (Biological study)
(activating immune response against myelin basic protein, peptide of T-cell receptor to, for multiple **sclerosis** treatment)

IT Multiple **sclerosis**
(diagnosis and treatment of, TCR receptor for antigen activating human immune response against myelin basic protein in relation to)

IT Gene, animal
RL: BIOL (Biological study)
(for HLA-DR2, multiple **sclerosis** T-cells reacting with immunodominant epitope of myelin basic protein in relation to)

IT Gene, animal
RL: BIOL (Biological study)
(for VB12 or VB17 of T-cell receptor of multiple **sclerosis** patients, myelin basic protein reactivity in relation to)

IT Nucleic acid hybridization
(multiple **sclerosis** diagnosis by, probes of human VB12 and VB17 nucleotide sequences for)

IT Vaccines
(multiple **sclerosis**, attenuated VB17 or VB12 human T-cells of multiple **sclerosis** patients for)

IT Deoxyribonucleic acid sequences
(of VB17 of multiple **sclerosis** T-cell receptor reactive with myelin basic protein)

IT Protein sequences
(of immunodominant region of human myelin basic protein reactive with multiple **sclerosis** T-cell receptor)

IT Peptides, biological studies
RL: BIOL (Biological study)
(of multiple **sclerosis** T-cell receptor, for multiple **sclerosis** treatment)

IT Phospholipoproteins
RL: BIOL (Biological study)
(MBP (myelin basic protein), antigen activating immune response against, peptide of T-cell receptor to, for multiple **sclerosis** treatment)

IT Lymphocyte
(T-cell, attenuated, contg. TCR receptor for antigen activating human immune response against myelin basic protein, for treatment of multiple **sclerosis**)

IT Receptors
RL: BIOL (Biological study)
(TCR (T-cell antigen receptor), for antigen activating immune response against myelin basic protein, peptides of, for multiple **sclerosis** treatment)

IT Antigens
RL: BIOL (Biological study)
(TCR receptors, for antigen activating immune response against myelin basic protein, peptides of, for multiple **sclerosis** treatment)

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IT Histocompatibility antigens
RL: PRP (Properties)
(class II, DR2 gene of, multiple **sclerosis** T-cells reacting with immunodominant epitope of myelin basic protein in relation to)

IT Peptides, compounds
RL: BIOL (Biological study)
(conjugates, of multiple **sclerosis** T-cell receptor, for multiple **sclerosis** treatment)

IT 138473-14-0 138473-15-1 138473-16-2 138473-17-3 138473-18-4
RL: PRP (Properties)
(amino acid sequence of, multiple **sclerosis** in relation to)

IT **129988-08-5**
RL: BIOL (Biological study)
(amino acid sequence, of immunodominant region of myelin basic protein recognized by multiple **sclerosis** T-cell receptors)

IT 138473-11-7 138473-12-8 138473-13-9
RL: BIOL (Biological study)
(amino acid sequence, of multiple **sclerosis** T-cell receptor, for multiple **sclerosis** treatment)

IT 138340-39-3 138340-39-3D, complementary sequences 138340-40-6 138340-86-0
RL: BIOL (Biological study)
(as hybridization probe for multiple **sclerosis** diagnosis)

IT 138340-34-8
RL: BIOL (Biological study)
(as primer for amplifying multiple **sclerosis** T-cell receptor VB17 region)

IT 129988-10-9
RL: BIOL (Biological study)
(multiple **sclerosis** T-cell receptors response to, of myelin basic protein)

IT 138340-49-5 138340-50-8 138340-51-9 138340-52-0
RL: PRP (Properties)
(nucleotide sequence of, multiple **sclerosis** in relation to)

L17 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2002 ACS
SO J. Neuroimmunol. (**1991**), 34(2-3), 181-90
CODEN: JNRIDW; ISSN: 0165-5728
AB . . . (CR-EAE) is an autoimmune demyelinating disease of the central nervous system and serves as an exptl. model of human multiple **sclerosis**. Amino acid residues p91-103 of myelin basic protein are encephalitogenic in SJL mice and transfer of T cell lines that. . .

IT Multiple **sclerosis**
(myelin basic protein peptide coupled to splenocytes in treatment of model of)

IT **138705-12-1**
RL: BIOL (Biological study)
(splenocytes coupled to, of myelin basic protein, treatment of chronic relapsing encephalomyelitis with)

L17 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2002 ACS
TI T cell response to myelin basic protein epitopes in multiple **sclerosis** patients and healthy subjects
SO Eur. J. Immunol. (**1991**), 21(6), 1391-5
CODEN: EJIMAF; ISSN: 0014-2980
AB T cell lines and clones specific for human myelin basic protein (BP) were selected from multiple **sclerosis** (MS) patients and healthy subjects and tested for their proliferative responses to a battery of synthetic peptides, 9 to 21. . .
ST myelin basic protein epitope multiple **sclerosis**
IT Multiple **sclerosis**

08/03/01

(myelin basic protein epitopes for T-lymphocytes in humans with)

IT Peptides, biological studies
RL: BIOL (Biological study)
(of myelin basic protein, human T-lymphocyte response to, in health and multiple **sclerosis**)

IT Antigens
RL: BIOL (Biological study)
(HLA, class II, myelin basic protein epitopes restricted by, for human T-lymphocytes, in health and multiple **sclerosis**)

IT Antigens
RL: BIOL (Biological study)
(HLA-DQw1, myelin basic protein epitopes restricted by, for human T-lymphocytes, in health and multiple **sclerosis**)

IT Antigens
RL: BIOL (Biological study)
(HLA-DR3, myelin basic protein epitopes restricted by, for human T-lymphocytes, in health and multiple **sclerosis**)

IT Antigens
RL: BIOL (Biological study)
(HLA-DR6, myelin basic protein epitopes restricted by, for human T-lymphocytes, in health and multiple **sclerosis**)

IT Antigens
RL: BIOL (Biological study)
(HLA-DRw11, myelin basic protein epitopes restricted by, for human T-lymphocytes, in health and multiple **sclerosis**)

IT Phospholipoproteins
RL: BIOL (Biological study)
(MBP (myelin basic protein), T-lymphocyte epitopes of human, in health and multiple **sclerosis**)

IT Lymphocyte
(T-, myelin basic protein epitopes for human, in health and multiple **sclerosis**)

IT 136917-29-8
RL: BIOL (Biological study)
(as residues 1-20 of myelin basic protein, human T-lymphocyte response to, in health and multiple **sclerosis**)

IT 136917-32-3
RL: BIOL (Biological study)
(as residues 144-156 of myelin basic protein, human T-lymphocyte response to, in health and multiple **sclerosis**)

IT 136917-34-5
RL: BIOL (Biological study)
(as residues 149-156 of myelin basic protein, human T-lymphocyte response to, in health and multiple **sclerosis**)

IT 136917-33-4
RL: BIOL (Biological study)
(as residues 149-162 of myelin basic protein, human T-lymphocyte response to, in health and multiple **sclerosis**)

IT 136917-30-1
RL: BIOL (Biological study)
(as residues 34-53 of myelin basic protein, human T-lymphocyte response to, in health and multiple **sclerosis**)

IT **136917-31-2**
RL: BIOL (Biological study)
(as residues 57-71 of myelin basic protein, human T-lymphocyte response to, in health and multiple **sclerosis**)

IT **108074-28-8**
RL: BIOL (Biological study)
(as residues 60-75 of myelin basic protein, human T-lymphocyte response to, in health and multiple **sclerosis**)

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L17 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2002 ACS
SO Eur. J. Immunol. (**1991**), 21(3), 693-9
CODEN: EJIMAF; ISSN: 0014-2980
AB . . . The presently described chronic EAE model induced in the B10RIII mice should be of value as a model for multiple **sclerosis**.
IT **118506-26-6**
RL: BIOL (Biological study)
(encephalomyelitis induction by, as myelin basic protein peptide)

L17 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2002 ACS
TI . . . myelin basic protein peptide is recognized by cytotoxic T cells in the context of four HLA-DR types associated with multiple **sclerosis**
SO J. Exp. Med. (**1991**), 173(1), 19-24
CODEN: JEMEAV; ISSN: 0022-1007
AB The peptide specificity of the T cell response to myelin basic protein (MBP) was previously examd. in patients with multiple **sclerosis** (MS) and healthy controls, and it was demonstrated that an epitope spanning amino acids 87-106 was frequently recognized. Because this. . .
ST myelin peptide recognition lymphocyte multiple **sclerosis**; DR antigen restriction multiple **sclerosis** peptide
IT Multiple **sclerosis**
(HLA-DR antigens assocd. with, cytotoxic T-lymphocyte recognition of myelin basic protein in relation to)
IT Antigens
RL: BIOL (Biological study)
(HLA-DR13(Dw19), multiple **sclerosis**-assocd. cytotoxic T-lymphocyte recognition of myelin basic protein in relation to)
IT Antigens
RL: BIOL (Biological study)
(HLA-DR15(Dw2), multiple **sclerosis**-assocd. cytotoxic T-lymphocyte recognition of myelin basic protein in relation to)
IT Antigens
RL: BIOL (Biological study)
(HLA-DR4(Dw14), multiple **sclerosis**-assocd. cytotoxic T-lymphocyte recognition of myelin basic protein in relation to)
IT Antigens
RL: BIOL (Biological study)
(HLA-DR4(Dw4), multiple **sclerosis**-assocd. cytotoxic T-lymphocyte recognition of myelin basic protein in relation to)
IT Phospholipoproteins
RL: BIOL (Biological study)
(MBP (myelin basic protein), peptide 87-106 of, cytotoxic T-lymphocyte recognition of, HLA-DR antigens restriction in, multiple **sclerosis** in relation to)
IT Lymphocyte
(T-, cytotoxic, myelin basic protein peptide recognition by, HLA-DR antigens restriction in, multiple **sclerosis** in humans in relation to)
IT **130184-08-6**
RL: BIOL (Biological study)
(cytotoxic T-lymphocyte recognition of, as myelin basic protein peptide 87-106, HLA-DR antigens restriction in, multiple **sclerosis** in humans in relation to)

L17 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2002 ACS
TI Fine specificity and HLA restriction of myelin basic protein-specific cytotoxic T cell lines from multiple **sclerosis** patients and healthy individuals
SO J. Immunol. (**1990**), 145(2), 540-8

09921880

CODEN: JOIMA3; ISSN: 0022-1767

AB . . . protein (MBP) is a candidate antigen (Ag) for the autoimmune process believed to be involved in the pathogenesis of multiple **sclerosis** (MS). To investigate the fine specificity and HLA restriction of human MBP-specific cytotoxic T-cells, long term T cell lines (TCL). . .

ST myelin basic protein lymphocyte multiple **sclerosis**

IT Multiple **sclerosis**
(cytotoxic T-lymphocytes specific for myelin basic protein in humans in, fine specificity and HLA restriction of)

IT Antigens
RL: BIOL (Biological study)
(HLA-DR, cytotoxic T-lymphocytes specific for myelin basic protein restriction by, in multiple **sclerosis** in humans)

IT Phospholipoproteins
RL: BIOL (Biological study)
(MBP (myelin basic protein), cytotoxic T-lymphocytes recognizing, fine specificity and HLA restriction of, in multiple **sclerosis** in humans)

IT Lymphocyte
(T-, cytotoxic, myelin basic protein-specific, fine specificity and HLA restriction of, in multiple **sclerosis** in humans)

IT 130184-09-7
RL: BIOL (Biological study)
(cytotoxic T-lymphocytes from humans in multiple **sclerosis** recognition of, as myelin basic protein peptide 154-172)

IT **130184-08-6**
RL: BIOL (Biological study)
(cytotoxic T-lymphocytes from humans in multiple **sclerosis** recognition of, as myelin basic protein peptide 87-106)

L17 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2002 ACS

TI T-cell recognition of an immunodominant myelin basic protein epitope in multiple **sclerosis**

SO Nature (London) (**1990**), 346(6280), 183-7
CODEN: NATUAS; ISSN: 0028-0836

AB To define the T-cell specificity toward myelin basic protein, 15,824 short-term T-cell lines were established from multiple **sclerosis** subjects, subjects with other neurol. diseases, and normal controls. A higher frequency of T-cell lines reactive with a DR2-assocd. region of myelin basic protein between residues 84-102 was found in patients with multiple **sclerosis** compared with controls. A second region, identified between residues 143-168, was recognized equally in multiple **sclerosis** patients and controls and was assocd. with the DRw11 phenotype. These DR2 and DRw11 assocns. were also obsd. among T-cell lines generated from family members of a multiple **sclerosis** patient. The immunodominant 84-102 peptide from myelin basic protein was both DR2- and DQw1-restricted among different T-cell lines. These results. . .

ST multiple **sclerosis** T lymphocyte epitope myelin; protein myelin basic epitope multiple **sclerosis**

IT Myelins
RL: BIOL (Biological study)
(basic protein of, epitopes of, T-lymphocytes recognition of, from humans with multiple **sclerosis**)

IT Antigens
RL: BIOL (Biological study)
(epitopes, of myelin basic protein, T-lymphocytes recognition of, from humans with multiple **sclerosis**)

IT Peptides, biological studies
RL: BIOL (Biological study)

08/03/01

(from myelin basic protein, T-lymphocytes recognition of, from humans with multiple **sclerosis**)

IT Multiple **sclerosis**
(myelin basic protein epitopes recognition by T-lymphocytes from humans in)

IT Antigens
RL: BIOL (Biological study)
(HLA-DQw1, T-lymphocyte recognition of myelin basic protein epitopes in humans with multiple **sclerosis** in relation to)

IT Antigens
RL: BIOL (Biological study)
(HLA-DR2, T-lymphocyte recognition of myelin basic protein epitopes in humans with multiple **sclerosis** in relation to)

IT Antigens
RL: BIOL (Biological study)
(HLA-DRw11, T-lymphocyte recognition of myelin basic protein epitopes in humans with multiple **sclerosis** in relation to)

IT Phospholipoproteins
RL: BIOL (Biological study)
(MBP (myelin basic protein), antigenic determinants of, T-lymphocytes recognition of, from humans with multiple **sclerosis**)

IT Lymphocyte
(T-, myelin basic protein epitopes recognition by, from humans with multiple **sclerosis**)

IT **129988-07-4 129988-08-5** 129988-09-6 129988-10-9
RL: PROC (Process)
(from myelin basic protein, T-lymphocytes recognition of, from humans with multiple **sclerosis**)

L17 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2002 ACS
SO Cell. Immunol. (**1990**), 129(1), 22-31
CODEN: CLIMB8; ISSN: 0008-8749
AB . . . immune T cells requires a processed form of MBP may have relevance to the human inflammatory CNS demyelinating condition, multiple **sclerosis**, for which EAE is the prime animal model.

IT **116919-44-9**
RL: PROC (Process)
(of myelin basic protein, processing of, requirement for, in recognition by T cells in encephalomyelitis)

L17 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2002 ACS
SO J. Neuroimmunol. (**1988**), 19(1-2), 47-57
CODEN: JNRIDW; ISSN: 0165-5728
ST . . . basic protein peptide detn; cerebrospinal fluid peptide neurol disease; RIA myelin basic protein peptide; central nervous system myelin damage; multiple **sclerosis** myelin basic protein

IT Multiple **sclerosis**
(myelin basic protein-like material in cerebrospinal fluid of human with)

IT **102623-08-5**, Human myelin basic protein peptide 80-89
RL: ANST (Analytical study)
(antibodies to myelin basic proteins in relation to)

IT **117338-92-8**, Human myelin basic protein peptide 69-89
RL: ANST (Analytical study)
(as ligand, for myelin basic protein-like materials detn. in cerebrospinal fluid of humans)

L17 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2002 ACS
SO J. Immunol. (**1988**), 140(2), 440-5
CODEN: JOIMA3; ISSN: 0022-1767
AB Exptl. autoimmune encephalomyelitis, a T cell-mediated autoimmune disease

studied as a model for multiple **sclerosis**, was suppressed in Lewis rats by the oral administration of myelin basic protein (MBP). Both the clin. and histopathol. manifestations. . .

IT Myelins
RL: BIOL (Biological study)
(basic protein of, multiple **sclerosis** model suppression by oral administration of)

IT 79127-18-7 79811-21-5 113782-48-2 **113782-84-6**
113782-88-0
RL: BIOL (Biological study)
(autoimmune encephalomyelitis suppression by oral administration of, of myelin basic protein)

L17 ANSWER 13 OF 14 CAPLUS COPYRIGHT 2002 ACS
TI Pharmaceutical mixture for suppression and diagnosis of multiple **sclerosis**
PI NL 7600523 **19760722**

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	NL 7600523	A	19760722	NL 1976-523	19760120 <--
	US 4113858	A	19780912	US 1976-648379	19760112 <--
	GB 1528336	A	19781011	GB 1976-1941	19760119 <--
	CH 614698	A	19791214	CH 1976-571	19760119 <--
	IL 48862	A1	19801231	IL 1976-48862	19760119 <--
	BE 837741	A1	19760514	BE 1976-163657	19760120 <--
	FR 2297633	A1	19760813	FR 1976-1444	19760120 <--
	FR 2297633	B1	19790223		
	ZA 7600308	A	19770126	ZA 1976-308	19760120 <--
	CA 1092600	A1	19801230	CA 1976-243826	19760120 <--

AB . . . peptides contg. certain glutamine-contg. sequences are inhibitors of exptl. allergic encephalomyelitis (EAE) in lab. animals, a model for human multiple **sclerosis**. Injected s.c., these peptides evoke a delayed hypersensitivity reaction in subjects with the disease, and are thus useful for diagnosis.. . .

ST peptide multiple **sclerosis**; allergic encephalomyelitis peptide

IT Peptides, biological studies
RL: SPN (Synthetic preparation); PREP (Preparation)
(glutamine-contg., prepn. and multiple **sclerosis**-inhibiting activity of)

IT **Sclerosis**
(multiple, peptides for treatment of)

IT 29705-91-7 **33036-31-6**
RL: BIOL (Biological study)
(allergic encephalomyelitis from, peptides for treatment of)

IT 55203-17-3P 57997-72-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, for multiple **sclerosis** treatment)

L17 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2002 ACS
TI Antidisease-producing synthetic materials for the prevention suppression and diagnosis of multiple **sclerosis**
PI US 3864481 **19750204**

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3864481	A	19750204	US 1972-315140	19721212 <--
	US 4113858	A	19780912	US 1976-648379	19760112 <--
	US 4230696	A	19801028	US 1978-941001	19780911 <--

AB . . . (25-1500 .mu.g), prevented allergic encephalomyelitis (EAE) induced by similar peptides in lab. animals. Since EAE is a model for multiple **sclerosis** in man, the peptide may be useful in prevention or diagnosis.

09921880

ST peptide multiple **sclerosis**; allergic encephalomyelitis multiple **sclerosis** model

IT Encephalomyelitis
(allergic, as multiple **sclerosis** model)

IT **Sclerosis**
(multiple, peptide treatment of)

IT 29705-91-7 **33036-31-6**
RL: BIOL (Biological study)
(allergic encephalomyelitis induction by, in multiple **sclerosis** model)

IT 55203-17-3
RL: BIOL (Biological study)
(multiple **sclerosis** treatment with)

=> FIL REGISTRY

	SINCE FILE ENTRY	TOTAL SESSION
COST IN U.S. DOLLARS		
FULL ESTIMATED COST	38.14	439.51
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-7.43	-12.39

FILE 'REGISTRY' ENTERED AT 16:10:00 ON 24 SEP 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 23 SEP 2002 HIGHEST RN 454421-17-1
DICTIONARY FILE UPDATES: 23 SEP 2002 HIGHEST RN 454421-17-1

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> S 29705-91-7/RN

L18 1 29705-91-7/RN

=> SET NOTICE 1 DISPLAY

NOTICE SET TO 1 U.S. DOLLAR FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=> D L18 SQIDE 1-

YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):y
THE ESTIMATED COST FOR THIS REQUEST IS 5.53 U.S. DOLLARS

08/03/01

09921880

DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L18 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS
RN **29705-91-7** REGISTRY
CN L-Lysine, L-phenylalanyl-L-seryl-L-tryptophylglycyl-L-alanyl-L-.alpha.-glutamylglycyl-L-glutaminyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN L-Lysine, N2-[N2-[N-[N-[N-[N-[N-(N-L-phenylalanyl-L-seryl)-L-tryptophyl]glycyl]-L-alanyl]-L-.alpha.-glutamyl]glycyl]-L-glutaminyl]-
CN Lysine, N2-[N2-[N-[N-[N-[N-[N-[N-(3-phenyl-L-alanyl)-L-seryl]-L-tryptophyl]glycyl]-L-alanyl]-L-.alpha.-glutamyl]glycyl]-L-glutaminyl]-, L- (8CI)
OTHER NAMES:
CN Encephalitogenic peptide
CN Phenylalanylseryltryptophylglycylalanylglutamylglycylglutaminyllysine
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 9

SEQ 1 FSWGAEGQK

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF C46 H64 N12 O14
LC STN Files: BIOSIS, BIOTECHNO, CA, CAPLUS, EMBASE, IFICDB, IFIPAT, IFIUDB, TOXCENTER, USPATFULL

Absolute stereochemistry.

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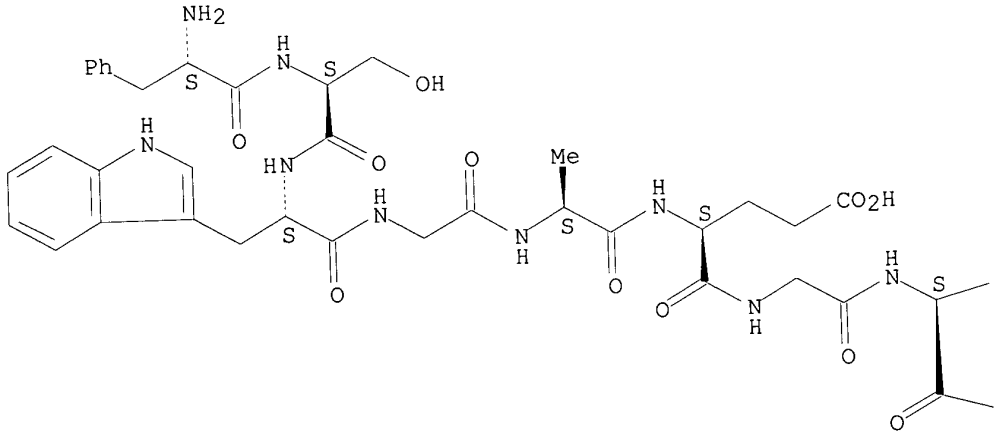
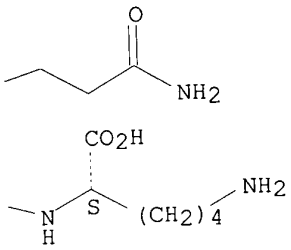




20 REFERENCES IN FILE CA (1962 TO DATE)
20 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> SET NOTICE LOGIN DISPLAY

NOTICE SET TO OFF FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=>

=> FIL REGISTRY

	SINCE FILE ENTRY	TOTAL SESSION
COST IN U.S. DOLLARS		
FULL ESTIMATED COST	8.19	447.70
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-12.39

FILE 'REGISTRY' ENTERED AT 16:13:58 ON 24 SEP 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 23 SEP 2002 HIGHEST RN 454421-17-1
DICTIONARY FILE UPDATES: 23 SEP 2002 HIGHEST RN 454421-17-1

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

08/03/01

09921880

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> S 79127-18-7/RN

L19 1 79127-18-7/RN

=> SET NOTICE 1 DISPLAY

NOTICE SET TO 1 U.S. DOLLAR FOR DISPLAY COMMAND
SET COMMAND COMPLETED

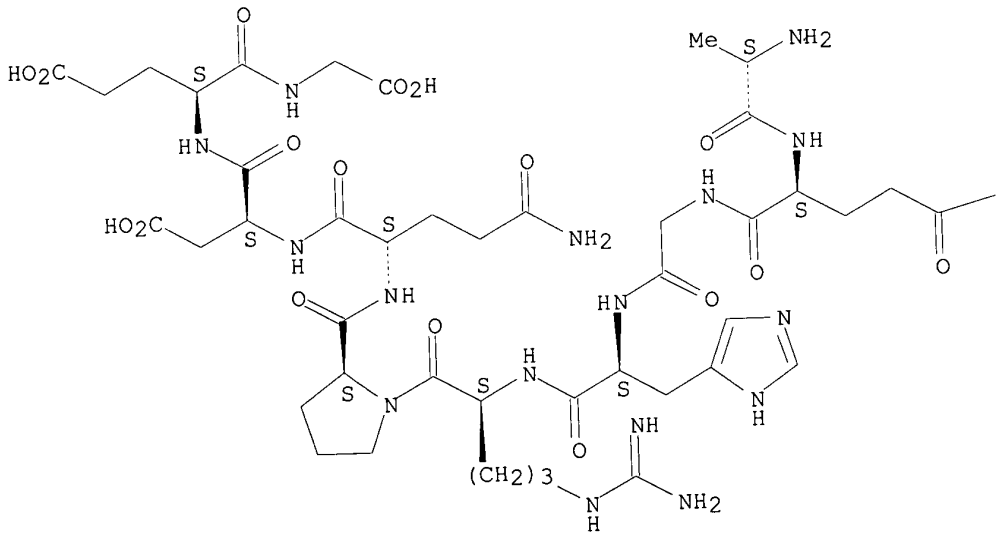
=> D L19 SQIDE 1-

YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):y
THE ESTIMATED COST FOR THIS REQUEST IS 5.53 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L19 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS
RN **79127-18-7** REGISTRY
CN Glycine, N-[N-[N-[N2-[1-[N2-[N-[N-(N2-L-alanyl-L-glutaminyl)glycyl]-L-histidyl]-L-arginyl]-L-prolyl]-L-glutaminyl]-L-.alpha.-aspartyl]-L-.alpha.-glutamyl]- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 10

SEQ 1 AQGHRPQDEG
MF C43 H67 N17 O17
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



—NH_2

10 REFERENCES IN FILE CA (1962 TO DATE)
10 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> SET NOTICE LOGIN DISPLAY

NOTICE SET TO OFF FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=>

=> FIL REGISTRY

	SINCE FILE ENTRY	TOTAL SESSION
COST IN U.S. DOLLARS		
FULL ESTIMATED COST	6.29	453.99
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-12.39

FILE 'REGISTRY' ENTERED AT 16:15:27 ON 24 SEP 2002

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 23 SEP 2002 HIGHEST RN 454421-17-1
DICTIONARY FILE UPDATES: 23 SEP 2002 HIGHEST RN 454421-17-1

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> S 113782-48-2/RN

L20 1 113782-48-2/RN

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=> SET NOTICE 1 DISPLAY

NOTICE SET TO 1 U.S. DOLLAR FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=> D L20 SQIDE 1-

YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):y
THE ESTIMATED COST FOR THIS REQUEST IS 5.53 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L20 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS
RN **113782-48-2** REGISTRY
CN L-Isoleucine, N-acetyl-L-alanyl-L-seryl-L-glutaminyl-L-lysyl-L-arginyl-L-prolyl-L-seryl-L-glutaminyl-L-arginyl-L-histidylglycyl-L-seryl-L-lysyl-L-tyrosyl-L-leucyl-L-alanyl-L-threonyl-L-alanyl-L-seryl-L-threonyl-L-methionyl-L-.alpha.-aspartyl-L-histidyl-L-alanyl-L-arginyl-L-histidylglycyl-L-phenylalanyl-L-leucyl-L-prolyl-L-arginyl-L-histidyl-L-arginyl-L-.alpha.-aspartyl-L-threonylglycyl- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE
SQL 37
NTE modified

type	------ location ------		description
terminal mod.	Ala-1	-	N-acetyl

SEQ 1 ASQKRPSQRH GSKYLATAST MDHARHGFLP RHRDTGI
MF C179 H286 N64 O53 S
CI MAN
SR CA
LC STN Files: CA, CAPLUS
1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> SET NOTICE LOGIN DISPLAY

NOTICE SET TO OFF FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=>

=> FIL REGISTRY

	SINCE FILE ENTRY	TOTAL SESSION
COST IN U.S. DOLLARS		
FULL ESTIMATED COST	5.91	459.90
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-12.39

FILE 'REGISTRY' ENTERED AT 16:16:16 ON 24 SEP 2002
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Property values tagged with IC are from the ZIC/VINITI data file

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provided by InfoChem.

STRUCTURE FILE UPDATES: 23 SEP 2002 HIGHEST RN 454421-17-1
DICTIONARY FILE UPDATES: 23 SEP 2002 HIGHEST RN 454421-17-1

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> S 113782-88-0/RN

L21 1 113782-88-0/RN

=> SET NOTICE 1 DISPLAY

NOTICE SET TO 1 U.S. DOLLAR FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=> D L21 SQIDE 1-

YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):y
THE ESTIMATED COST FOR THIS REQUEST IS 5.53 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L21 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS
RN **113782-88-0** REGISTRY
CN 90-167-Protein (guinea pig myelin basic) (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE
SQL 78

SEQ 1 KNIVTPRTPP PSQGKGRGLS LSRFSWGAEG QKPGFGYGGR ADYKSKGFKG
51 AHDAQGTLSK IFKLGGRDSR SGSPMARR

MF C363 H579 N117 O105 S
CI MAN
SR CA
LC STN Files: CA, CAPLUS
1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> SET NOTICE LOGIN DISPLAY

NOTICE SET TO OFF FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=>

=>

---Logging off of STN---

08/03/01

09921880

=>
Executing the logoff script...

=> LOG Y

	SINCE FILE ENTRY	TOTAL SESSION
COST IN U.S. DOLLARS		
FULL ESTIMATED COST	5.91	465.81
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-12.39

STN INTERNATIONAL LOGOFF AT 16:16:42 ON 24 SEP 2002

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssspta1653sxs

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2	Apr 08	"Ask CAS" for self-help around the clock
NEWS 3	Apr 09	BEILSTEIN: Reload and Implementation of a New Subject Area
NEWS 4	Apr 09	ZDB will be removed from STN
NEWS 5	Apr 19	US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
NEWS 6	Apr 22	Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
NEWS 7	Apr 22	BIOSIS Gene Names now available in TOXCENTER
NEWS 8	Apr 22	Federal Research in Progress (FEDRIP) now available
NEWS 9	Jun 03	New e-mail delivery for search results now available
NEWS 10	Jun 10	MEDLINE Reload
NEWS 11	Jun 10	PCTFULL has been reloaded
NEWS 12	Jul 02	FOREGE no longer contains STANDARDS file segment
NEWS 13	Jul 22	USAN to be reloaded July 28, 2002; saved answer sets no longer valid
NEWS 14	Jul 29	Enhanced polymer searching in REGISTRY
NEWS 15	Jul 30	NETFIRST to be removed from STN
NEWS 16	Aug 08	CANCERLIT reload
NEWS 17	Aug 08	PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 18	Aug 08	NTIS has been reloaded and enhanced
NEWS 19	Aug 19	Aquatic Toxicity Information Retrieval (AQUIRE) now available on STN
NEWS 20	Aug 19	IFIPAT, IFICDB, and IFIUDB have been reloaded
NEWS 21	Aug 19	The MEDLINE file segment of TOXCENTER has been reloaded
NEWS 22	Aug 26	Sequence searching in REGISTRY enhanced
NEWS 23	Sep 03	JAPIO has been reloaded and enhanced
NEWS 24	Sep 16	Experimental properties added to the REGISTRY file
NEWS 25	Sep 16	Indexing added to some pre-1967 records in CA/CAPLUS
NEWS 26	Sep 16	CA Section Thesaurus available in CAPLUS and CA

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NEWS EXPRESS February 1 CURRENT WINDOWS VERSION IS V6.0d,
CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),
AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002
NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS INTER General Internet Information
NEWS LOGIN Welcome Banner and News Items
NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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* * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 17:59:03 ON 24 SEP 2002

=> FIL REGISTRY
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 17:59:37 ON 24 SEP 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 23 SEP 2002 HIGHEST RN 454421-17-1
DICTIONARY FILE UPDATES: 23 SEP 2002 HIGHEST RN 454421-17-1

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> s KSHGRTQDENPVVHFFKNIVT/SQEP
1 KSHGRTQDENPVVHFFKNIVT/SQEP
77388 SQL=21
L1 1 KSHGRTQDENPVVHFFKNIVT/SQEP
(KSHGRTQDENPVVHFFKNIVT/SQEP AND SQL=21)

=> s TQDENPVVHFFKNIVTPR/SQEP
1 TQDENPVVHFFKNIVTPR/SQEP

09921880

```
         67747 SQL=18
L2           1 TQDENPVVHFFKNIVTPR/SQEP
               (TQDENPVVHFFKNIVTPR/SQEP AND SQL=18)

=> s KNIVTPRTPPPSQGKG/SQEP
             1 KNIVTPRTPPPSQGKG/SQEP
         31862 SQL=16
L3           1 KNIVTPRTPPPSQGKG/SQEP
               (KNIVTPRTPPPSQGKG/SQEP AND SQL=16)

=> s 2 NPVVHFFKNI/SQEP
2 IS NOT A VALID AMINO ACID SYMBOL.

=> s NPVVHFFKNI/SQEP
             2 NPVVHFFKNI/SQEP
         89424 SQL=10
L4           2 NPVVHFFKNI/SQEP
               (NPVVHFFKNI/SQEP AND SQL=10)

=> s PVVHFFKNIV/SQEP
             1 PVVHFFKNIV/SQEP
         89424 SQL=10
L5           1 PVVHFFKNIV/SQEP
               (PVVHFFKNIV/SQEP AND SQL=10)

=> s VVHFFKNIVT/SQEP
             1 VVHFFKNIVT/SQEP
         89424 SQL=10
L6           1 VVHFFKNIVT/SQEP
               (VVHFFKNIVT/SQEP AND SQL=10)

=> s VHFFKNIVTP/SQEP
             2 VHFFKNIVTP/SQEP
         89424 SQL=10
L7           2 VHFFKNIVTP/SQEP
               (VHFFKNIVTP/SQEP AND SQL=10)

=> d hist

     (FILE 'HOME' ENTERED AT 17:59:03 ON 24 SEP 2002)

     FILE 'REGISTRY' ENTERED AT 17:59:37 ON 24 SEP 2002
L1             1 S KSHGRTQDENPVVHFFKNIVT/SQEP
L2             1 S TQDENPVVHFFKNIVTPR/SQEP
L3             1 S KNIVTPRTPPPSQGKG/SQEP
L4             2 S NPVVHFFKNI/SQEP
L5             1 S PVVHFFKNIV/SQEP
L6             1 S VVHFFKNIVT/SQEP
L7             2 S VHFFKNIVTP/SQEP

=> d l1

L1   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2002 ACS
RN   178273-99-9  REGISTRY
CN   L-Threonine, L-lysyl-L-seryl-L-histidylglycyl-L-arginyl-L-threonyl-L-
     glutaminyl-L-.alpha.-aspartyl-L-.alpha.-glutamyl-L-asparaginyl-L-prolyl-L-
     valyl-L-valyl-L-histidyl-L-phenylalanyl-L-phenylalanyl-L-lysyl-L-
     asparaginyl-L-isoleucyl-L-valyl- (9CI)  (CA INDEX NAME)
OTHER NAMES:
CN   1: PN: US6252040 PAGE: 3/4 claimed sequence
FS   PROTEIN SEQUENCE; STEREOSEARCH


08/03/01
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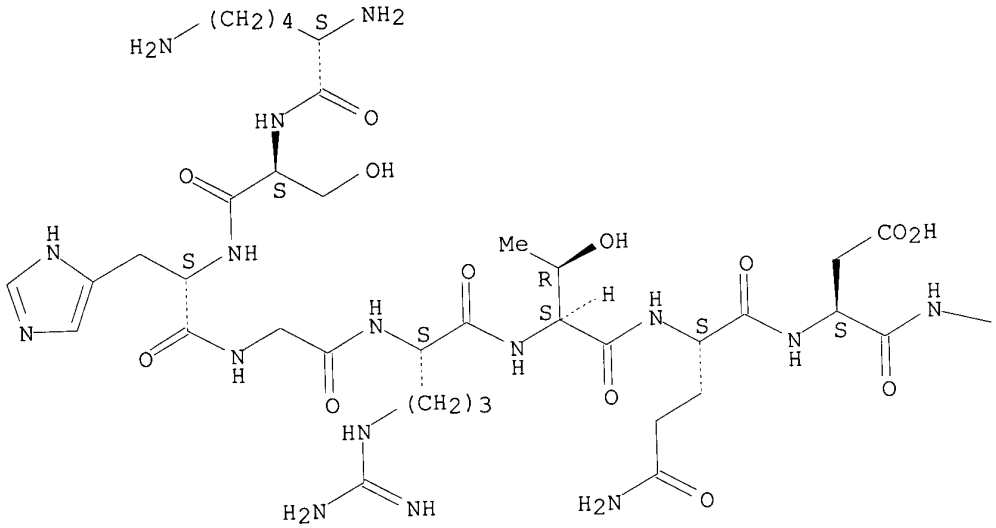
09921880

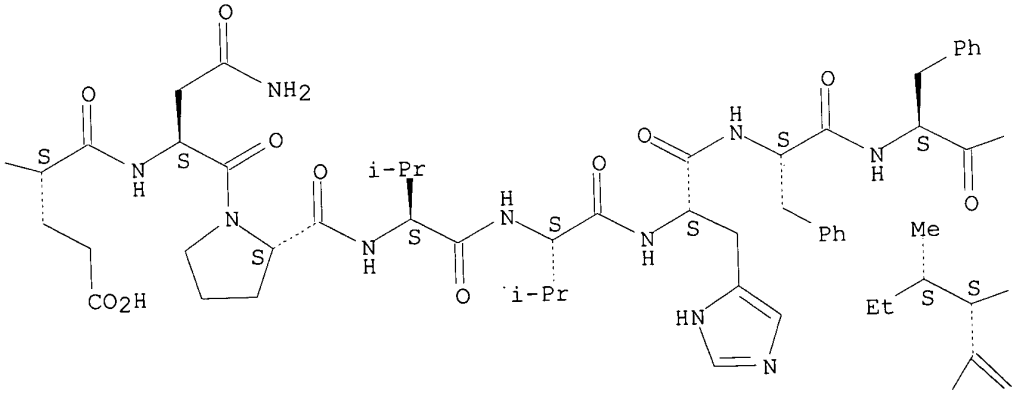
MF C109 H169 N33 O32
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

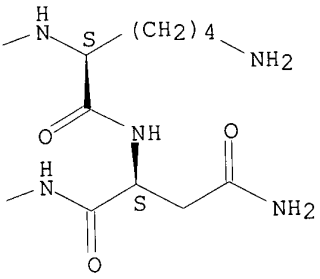
PAGE 1-A



PAGE 1-B



PAGE 1-C



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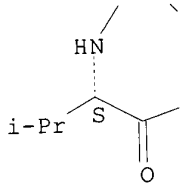

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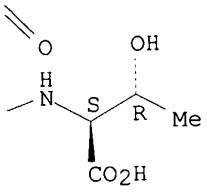

3 REFERENCES IN FILE CA (1962 TO DATE)
3 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> FIL REGISTRY

	SINCE FILE ENTRY	TOTAL SESSION
COST IN U.S. DOLLARS		
FULL ESTIMATED COST	47.20	47.41

08/03/01

09921880

FILE 'REGISTRY' ENTERED AT 18:02:13 ON 24 SEP 2002
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STRUCTURE FILE UPDATES: 23 SEP 2002 HIGHEST RN 454421-17-1
DICTIONARY FILE UPDATES: 23 SEP 2002 HIGHEST RN 454421-17-1

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP
PROPERTIES for more information. See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> SET TERMSET E#

SET COMMAND COMPLETED

=> DEL SEL Y

=> SEL L1 1 RN

E1 THROUGH E1 ASSIGNED

=> S E1/RN

L8 1 178273-99-9/RN

=> SET TERMSET LOGIN

SET COMMAND COMPLETED

=> FIL CAPLUS

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.46	47.87

FILE 'CAPLUS' ENTERED AT 18:02:23 ON 24 SEP 2002
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FILE COVERS 1907 - 24 Sep 2002 VOL 137 ISS 13
FILE LAST UPDATED: 23 Sep 2002 (20020923/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> S L8

L9 3 L8

=> DIS L9 1 TI

L9 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2002 ACS
TI Peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple sclerosis patients

=> DIS L9 2 HIT
THE ESTIMATED COST FOR THIS REQUEST IS 2.57 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

L9 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2002 ACS
IT 152074-97-0 155029-61-1 160219-24-9 171205-21-3 178273-97-7D, peptides-contg. **178273-99-9** 214773-01-0 214773-13-4 214773-21-4
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(peptide fragments of myelin basic protein in treatment of multiple sclerosis in humans)

=> d l9 py ab so pn

L9 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2002 ACS
PY 2001
1993
2001
2002
AB Human myelin basic protein (h-MBP) has a mol. wt. of 18.5 KD and contains 170 amino acid residues. Synthetic peptides ranging in length from about 8 to 25 residues and covering the entire length of the protein have been produced. Antibodies to h-MBP (anti-MBP) were found to be neutralized by the synthetic peptides, in vitro, which span the h-MBP from about amino acid residue 61 to about amino acid residue 106. The peptides, which cover both the amino (about residues 1 to 63) and carboxy (about residues 117 to 162) terminals of h-MBP did not neutralize purified anti-MBP. Intrathecal administration of peptide MBP(75-95), MBP(86-95), or MBP(82-98) produced complete binding-neutralization of free (F) anti-MBP with no change in bound (B) levels. A control peptide MBP35-58 had no effect on F or B anti-MBP levels. I.v. administration of MBP(75-95),

MBP(86-95), or MBP(82-98) resulted in significant decline of F and B CSF anti-MBP levels. Administration of MBP synthetic peptides to MS patients either intrathecally or i.v. did not have any adverse neurol. effects and systemic complications did not occur. The MBP epitope for MS anti-MBP has been localized to an area between amino acid 86 and amino acid 95.

SO U.S., 41 pp., Cont.-in-part of U.S. Ser. No. 7,520.
CODEN: USXXAM

	PATENT NO.	KIND	DATE
PI	US 6252040	B1	20010626
	CA 2053799	AA	19930423
	US 6258781	B1	20010710
	US 2002111312	A1	20020815

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L9 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2002 ACS
AN 2001:468219 CAPLUS
DN 135:56083
TI Peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple sclerosis patients
IN Warren, Kenneth G.; Catz, Ingrid
PA Governors of the University of Alberta, Can.
SO U.S., 41 pp., Cont.-in-part of U.S. Ser. No. 7,520.
CODEN: USXXAM
DT Patent
LA English
IC ICM A61K038-04
ICS A61K038-00; C07K005-00; C07K007-00
NCL 530328000
CC 1-11 (Pharmacology)
Section cross-reference(s): 63
FAN.CNT 3

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PI	US 6252040	B1	20010626	US 1998-55263	19980406
	CA 2053799	AA	19930423	CA 1991-2053799	19911022
	US 6258781	B1	20010710	US 1998-7520	19980115
	US 2002111312	A1	20020815	US 2001-813383	20010320
PRAI	CA 1991-2053799	A	19911022		
	US 1991-798099	B2	19911127		
	US 1994-327357	A1	19941021		
	US 1998-7520	A2	19980115		

OS MARPAT 135:56083
AB Human myelin basic protein (h-MBP) has a mol. wt. of 18.5 KD and contains 170 amino acid residues. Synthetic peptides ranging in length from about 8 to 25 residues and covering the entire length of the protein have been produced. Antibodies to h-MBP (anti-MBP) were found to be neutralized by the synthetic peptides, in vitro, which span the h-MBP from about amino acid residue 61 to about amino acid residue 106. The peptides, which cover both the amino (about residues 1 to 63) and carboxy (about residues 117 to 162) terminals of h-MBP did not neutralize purified anti-MBP. Intrathecal administration of peptide MBP(75-95), MBP(86-95), or MBP(82-98) produced complete binding-neutralization of free (F) anti-MBP with no change in bound (B) levels. A control peptide MBP35-58 had no effect on F or B anti-MBP levels. I.v. administration of MBP(75-95), MBP(86-95), or MBP(82-98) resulted in significant decline of F and B CSF anti-MBP levels. Administration of MBP synthetic peptides to MS patients either intrathecally or i.v. did not have any adverse neurol. effects and

systemic complications did not occur. The MBP epitope for MS anti-MBP has been localized to an area between amino acid 86 and amino acid 95.

ST multiple sclerosis peptide neutralizing antibody myelin basic protein

IT Myelin basic protein
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(autoantibodies to; peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple sclerosis patients)

IT Antibodies
RL: ADV (Adverse effect, including toxicity); BPR (Biological process); BSU (Biological study, unclassified); REM (Removal or disposal); BIOL (Biological study); PROC (Process)
(autoantibodies, to myelin basic protein; peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple sclerosis patients)

IT Drug delivery systems
(carriers; peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple sclerosis patients)

IT Drug delivery systems
(injections, i.v.; peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple sclerosis patients)

IT Drug delivery systems
(injections, intrathecal; peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple sclerosis patients)

IT Multiple sclerosis
Protein sequences
(peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple sclerosis patients)

IT Peptides, biological studies
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple sclerosis patients)

IT 11084-77-8, Myelin basic protein (human)
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)
(amino acid sequence; peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple sclerosis patients)

IT 144449-89-8 144449-90-1 144449-94-5 152074-97-0 155029-61-1
160219-22-7 160219-24-9 171205-21-3 **178273-99-9**
346426-58-2 346426-60-6
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple sclerosis patients)

RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Anon; WO 8810120 1988 CAPLUS
(2) Anon; EP 0304279 1989 CAPLUS
(3) Anon; WO 9115225 1991 CAPLUS
(4) Anon; WO 9308212 1993 CAPLUS

(5) Anon; WO 9321222 1993 CAPLUS
(6) Anon; WO 9612731 1996 CAPLUS
(7) Anon; WO 9612737 1996 CAPLUS
(8) Anon; WO 9616086 1996 CAPLUS
(9) Constantin, N; Journal of Neuroimmunology 1989, V22, P23
(10) Eylar, E; Neurochemical Research 1979, 4, P249
(11) Gaur; US 5948764 1999 CAPLUS
(12) Hafler; US 5571499 1996 CAPLUS
(13) Hafler; US 5571500 1996 CAPLUS
(14) Hafler; US 5641474 1997 CAPLUS
(15) Hafler; US 5645820 1997 CAPLUS
(16) Kohei, O; Nature 1990, V346, P183
(17) Koichior, S; Proc Natl Acad Sci USA 1989, V86, P9470
(18) Nigel, G; Neurochem Int 1985, V7(2), P309
(19) Richard, B; Neurochem Int 1991, V18(2), P291
(20) Roland, M; The Journal of Experimental Medicine 1991, V173, P19
(21) Roland, M; The Journal of Immunology 1990, V145, P540
(22) Sarka, H; Molecular Immunoogy 1987, V24(12), P1359
(23) Warren, K; J Neurol Sci 1997, V152, P31 CAPLUS
(24) Weiner; US 5858364 1999 CAPLUS
(25) Weiner; US 5858980 1999 CAPLUS
(26) Weiner; US 5869054 1999 CAPLUS
(27) Weiner; US 5869093 1999 CAPLUS
(28) Weiner; US 5935577 1999 CAPLUS
(29) Weiner; US 6036957 2000 CAPLUS
(30) Weiner; US 6039947 2000 CAPLUS
(31) Yuan, K; Journal of Neuroscience Research 1989, V23, P207

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L2             1 S TQDENPVVHFFKNIVTPR/SQEP
L3             1 S KNIVTPRTPPPSQGKG/SQEP
L4             2 S NPVVHFFKNI/SQEP
L5             1 S PVVHFFKNIV/SQEP
L6             1 S VVHFFKNIVT/SQEP
L7             2 S VHFFKNIVTP/SQEP

     FILE 'REGISTRY' ENTERED AT 18:02:13 ON 24 SEP 2002
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                DEL SEL Y
                SEL L1 1 RN
L8             1 S E1/RN
                SET TERMSET LOGIN

     FILE 'CAPLUS' ENTERED AT 18:02:23 ON 24 SEP 2002
L9             3 S L8

=> s l2
L10            1 L2

=> d l2 py au ab so ti
YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:y


'PY' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'
'AU' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'


08/03/01
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09921880

'AB' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'
'SO' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'
'TI' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

The following are valid formats:

Substance information can be displayed by requesting individual fields or predefined formats. The predefined substance formats are: (RN = CAS Registry Number)

REG - RN
SAM - Index Name, MF, and structure - no RN
FIDE - All substance data, except sequence data
IDE - FIDE, but only 50 names
SQIDE - IDE, plus sequence data
SQIDE3 - Same as SQIDE, but 3-letter amino acid codes are used
SQD - Protein sequence data, includes RN
SQD3 - Same as SQD, but 3-letter amino acid codes are used
SQN - Protein sequence name information, includes RN

CALC - Table of calculated properties
EPROP - Table of experimental properties
PROP - EPROP and CALC

Any CA File format may be combined with any substance format to obtain CA references citing the substance. The substance formats must be cited first. The CA File predefined formats are:

ABS -- Abstract
APPS -- Application and Priority Information
BIB -- CA Accession Number, plus Bibliographic Data
CAN -- CA Accession Number
CBIB -- CA Accession Number, plus Bibliographic Data (compressed)
IND -- Index Data
IPC -- International Patent Classification
PATS -- PI, SO
STD -- BIB, IPC, and NCL

IABS --ABS, indented, with text labels
IBIB -- BIB, indented, with text labels
ISTD -- STD format, indented

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

The ALL format gives FIDE BIB ABS IND RE, plus sequence data when it is available.
The MAX format is the same as ALL.
The IALL format is the same as ALL with BIB ABS and IND indented, with text labels.

For additional information, please consult the following help messages:

HELP DFIELDS -- To see a complete list of individual display fields.
HELP FORMATS -- To see detailed descriptions of the predefined formats.
ENTER DISPLAY FORMAT (IDE):
ENTER DISPLAY FORMAT (IDE):

08/03/01

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ENTER DISPLAY FORMAT (IDE):sdf
'SDF' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

The following are valid formats:

Substance information can be displayed by requesting individual fields or predefined formats. The predefined substance formats are: (RN = CAS Registry Number)

REG - RN
SAM - Index Name, MF, and structure - no RN
FIDE - All substance data, except sequence data
IDE - FIDE, but only 50 names
SQIDE - IDE, plus sequence data
SQIDE3 - Same as SQIDE, but 3-letter amino acid codes are used
SQD - Protein sequence data, includes RN
SQD3 - Same as SQD, but 3-letter amino acid codes are used
SQN - Protein sequence name information, includes RN

CALC - Table of calculated properties
EPROP - Table of experimental properties
PROP - EPROP and CALC

Any CA File format may be combined with any substance format to obtain CA references citing the substance. The substance formats must be cited first. The CA File predefined formats are:

ABS -- Abstract
APPS -- Application and Priority Information
BIB -- CA Accession Number, plus Bibliographic Data
CAN -- CA Accession Number
CBIB -- CA Accession Number, plus Bibliographic Data (compressed)
IND -- Index Data
IPC -- International Patent Classification
PATS -- PI, SO
STD -- BIB, IPC, and NCL

IABS --ABS, indented, with text labels
IBIB -- BIB, indented, with text labels
ISTD -- STD format, indented

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

The ALL format gives FIDE BIB ABS IND RE, plus sequence data when it is available.
The MAX format is the same as ALL.
The IALL format is the same as ALL with BIB ABS and IND indented, with text labels.

For additional information, please consult the following help messages:

HELP DFIELDS -- To see a complete list of individual display fields.
HELP FORMATS -- To see detailed descriptions of the predefined formats.
ENTER DISPLAY FORMAT (IDE):rn

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS

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RN 346426-60-6 REGISTRY

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L2 1 S TQDENPVVHFFKNIVTPR/SQEP
L3 1 S KNIVTPRTPPPSQGKG/SQEP
L4 2 S NPVVHFFKNI/SQEP
L5 1 S PVVHFFKNIV/SQEP
L6 1 S VVHFFKNIVT/SQEP
L7 2 S VHFFKNIVTP/SQEP

FILE 'REGISTRY' ENTERED AT 18:02:13 ON 24 SEP 2002
SET TERMSET E#
DEL SEL Y
SEL L1 1 RN
L8 1 S E1/RN
SET TERMSET LOGIN

FILE 'CAPLUS' ENTERED AT 18:02:23 ON 24 SEP 2002
L9 3 S L8
L10 1 S L2

FILE 'REGISTRY' ENTERED AT 18:05:04 ON 24 SEP 2002

FILE 'CAPLUS' ENTERED AT 18:05:34 ON 24 SEP 2002

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YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:y

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **18**

SEQ 1 TQDENPVVHF FKNIVTPR
========== ========
HITS AT: 1-18

=> d l2
YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:n

=> FIL REGISTRY

	SINCE FILE ENTRY	TOTAL SESSION
COST IN U.S. DOLLARS		
FULL ESTIMATED COST	0.79	62.53
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-1.24

FILE 'REGISTRY' ENTERED AT 18:06:54 ON 24 SEP 2002
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STRUCTURE FILE UPDATES: 23 SEP 2002 HIGHEST RN 454421-17-1
DICTIONARY FILE UPDATES: 23 SEP 2002 HIGHEST RN 454421-17-1

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d l2

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS
RN 346426-60-6 REGISTRY
CN L-Arginine, L-threonyl-L-glutaminyl-L-.alpha.-aspartyl-L-.alpha.-glutamyl-L-asparaginyl-L-prolyl-L-valyl-L-valyl-L-histidyl-L-phenylalanyl-L-phenylalanyl-L-lysyl-L-asparaginyl-L-isoleucyl-L-valyl-L-threonyl-L-prolyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 5: PN: US6252040 PAGE: 3/4 claimed sequence
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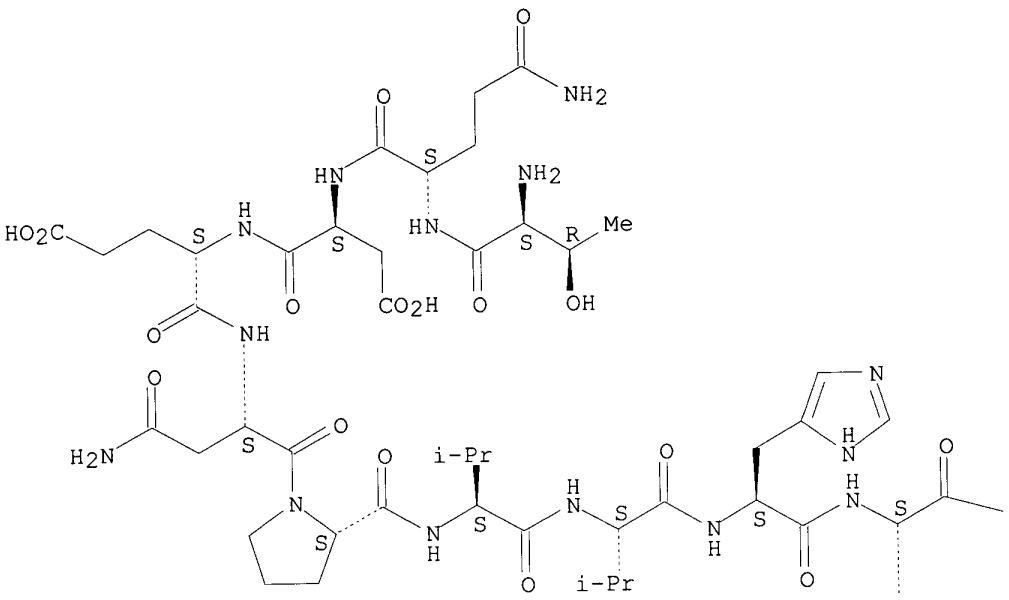
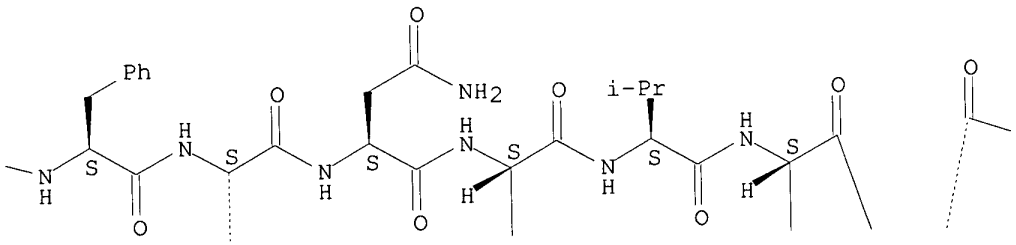
MF C97 H149 N27 O28
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



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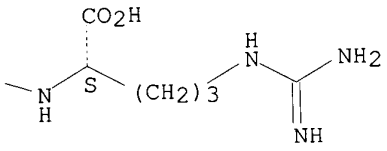

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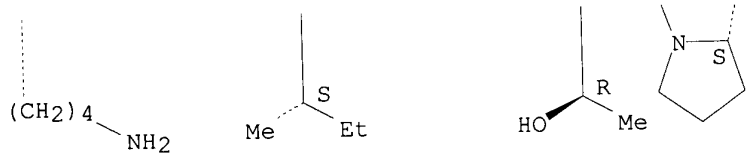
PAGE 2-B



1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> d l3

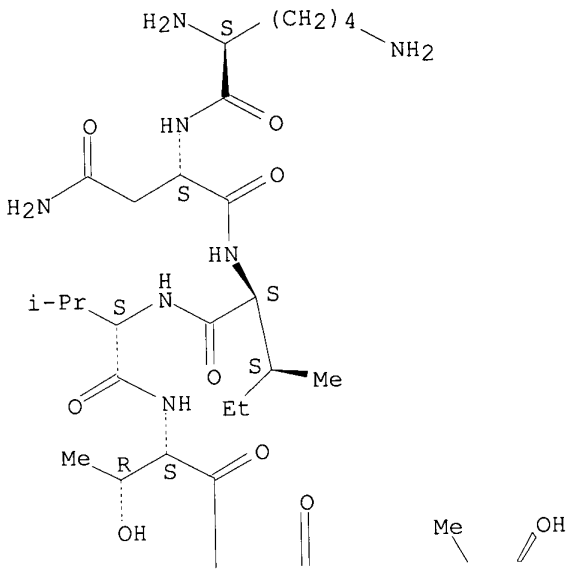
L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS
RN 144449-94-5 REGISTRY
CN Glycine, L-lysyl-L-asparaginyl-L-isoleucyl-L-valyl-L-threonyl-L-prolyl-L-arginyl-L-threonyl-L-prolyl-L-prolyl-L-prolyl-L-seryl-L-glutaminylglycyl-L-lysyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 6: PN: US6252040 PAGE: 3/4 claimed sequence

09921880

FS PROTEIN SEQUENCE; STEREOSEARCH
MF C73 H125 N23 O22
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

PAGE 1-A



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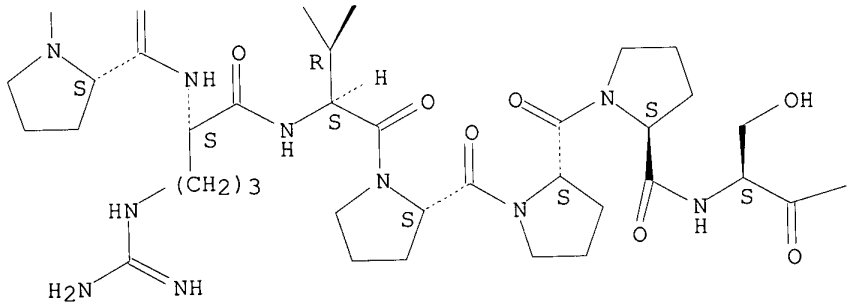
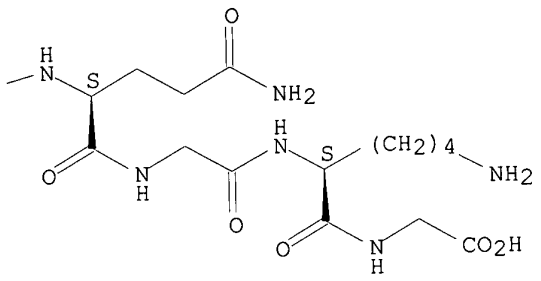




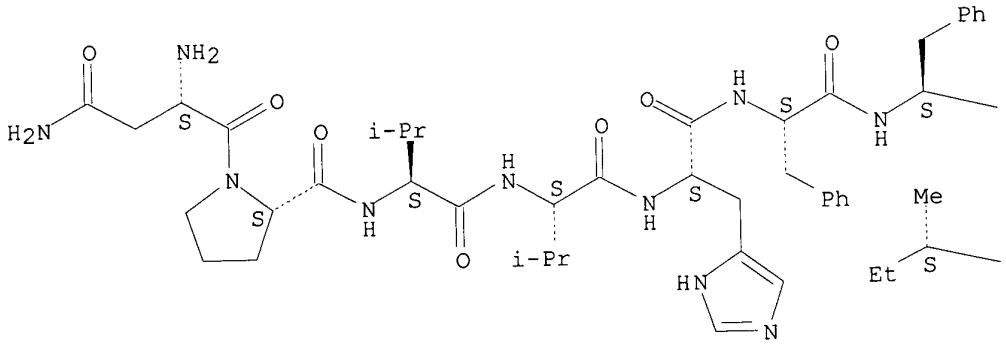
4 REFERENCES IN FILE CA (1962 TO DATE)
4 REFERENCES IN FILE CAPLUS (1962 TO DATE)

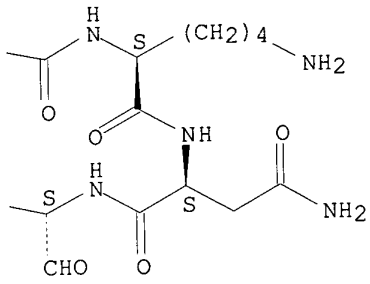
=> d l4

L4 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2002 ACS
RN 178273-98-8 REGISTRY
CN L-Aspartamide, L-asparaginyl-L-prolyl-L-valyl-L-valyl-L-histidyl-L-phenylalanyl-L-phenylalanyl-L-lysyl-N1-(1-formyl-2-methylbutyl)-, [S-(R*,R*)]- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C59 H87 N15 O12
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.





1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> d hist

(FILE 'HOME' ENTERED AT 17:59:03 ON 24 SEP 2002)

FILE 'REGISTRY' ENTERED AT 17:59:37 ON 24 SEP 2002
L1 1 S KSHGRTQDENPVVHFFKNIVT/SQEP
L2 1 S TQDENPVVHFFKNIVTPR/SQEP
L3 1 S KNIVTPRTPPPSQGKG/SQEP
L4 2 S NPVVHFFKNI/SQEP
L5 1 S PVVHFFKNIV/SQEP
L6 1 S VVHFFKNIVT/SQEP
L7 2 S VHFFKNIVTP/SQEP

FILE 'REGISTRY' ENTERED AT 18:02:13 ON 24 SEP 2002
SET TERMSET E#
DEL SEL Y
SEL L1 1 RN
L8 1 S E1/RN
SET TERMSET LOGIN

FILE 'CAPLUS' ENTERED AT 18:02:23 ON 24 SEP 2002
L9 3 S L8
L10 1 S L2

FILE 'REGISTRY' ENTERED AT 18:05:04 ON 24 SEP 2002

FILE 'CAPLUS' ENTERED AT 18:05:34 ON 24 SEP 2002

FILE 'REGISTRY' ENTERED AT 18:05:55 ON 24 SEP 2002

FILE 'CAPLUS' ENTERED AT 18:05:55 ON 24 SEP 2002

FILE 'REGISTRY' ENTERED AT 18:06:54 ON 24 SEP 2002

=> d l5

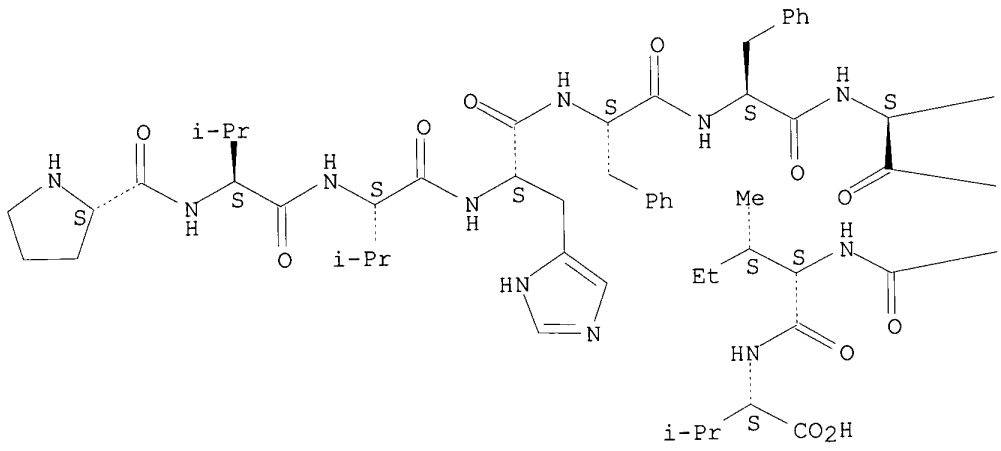
L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS
RN 160219-24-9 REGISTRY
CN L-Valine, L-prolyl-L-valyl-L-valyl-L-histidyl-L-phenylalanyl-L-phenylalanyl-L-lysyl-L-asparaginyl-L-isoleucyl- (9CI) (CA INDEX NAME)

09921880

OTHER CA INDEX NAMES:
CN L-Valine, N-[N-[N2-[N2-[N-[N-[N-[N-(N-L-prolyl-L-valyl)-L-valyl]-L-histidyl]-L-phenylalanyl]-L-phenylalanyl]-L-lysyl]-L-asparaginyl]-L-isoleucyl]-
OTHER NAMES:
CN 8: PN: US6252040 PAGE: 3/4 claimed sequence
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C60 H90 N14 O12
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

PAGE 1-A



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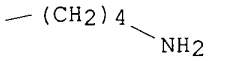
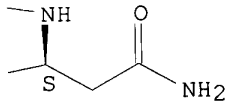




4 REFERENCES IN FILE CA (1962 TO DATE)
4 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> d l6

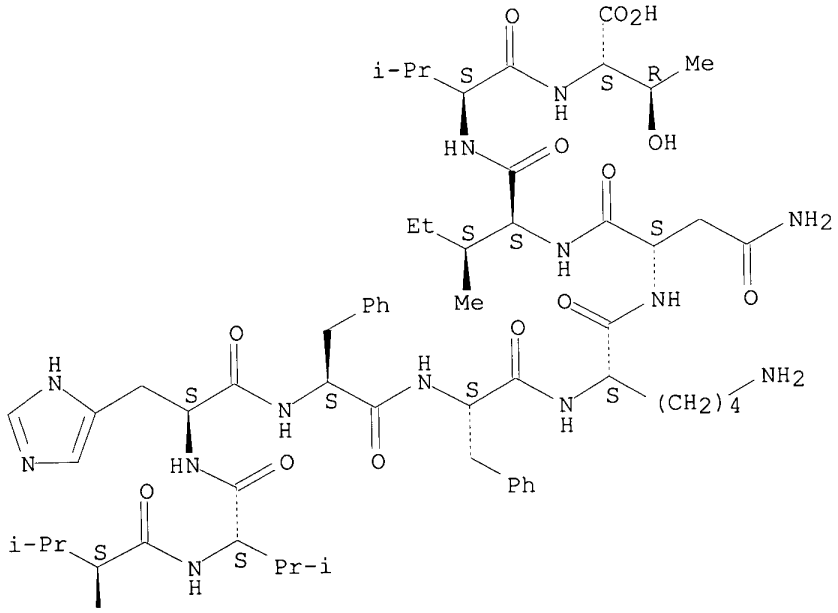
L6 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS
RN 171205-21-3 REGISTRY
CN L-Threonine, L-valyl-L-valyl-L-histidyl-L-phenylalanyl-L-phenylalanyl-L-

08/03/01

lysyl-L-asparaginyl-L-isoleucyl-L-valyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN L-Threonine, N-[N-[N-[N2-[N2-[N-[N-[N-(N-L-valyl-L-valyl)-L-histidyl]-L-phenylalanyl]-L-phenylalanyl]-L-lysyl]-L-asparaginyl]-L-isoleucyl]-L-valyl]-
OTHER NAMES:
CN 9: PN: US6252040 PAGE: 3/4 claimed sequence
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C59 H90 N14 O13
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

4 REFERENCES IN FILE CA (1962 TO DATE)
4 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> d l7

L7 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2002 ACS
RN 178274-00-5 REGISTRY
CN L-Proline, 1-[N-[N-[N-[N2-[N2-[N-[N-[N-(N-hydroxy-L-valyl)-L-histidyl]-L-phenylalanyl]-L-phenylalanyl]-L-lysyl]-L-asparaginyl]-L-isoleucyl]-L-valyl]-L-threonyl]- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH

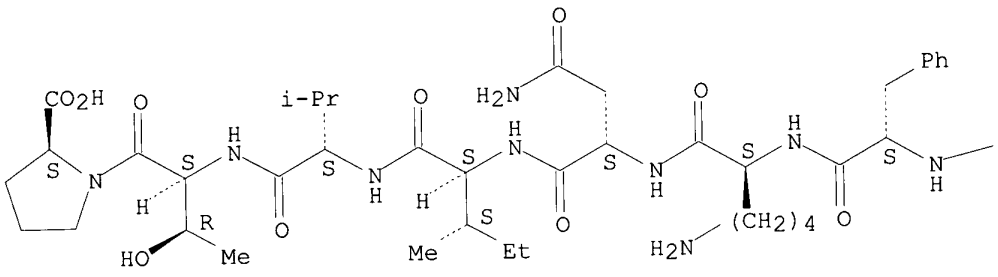
09921880

MF C59 H88 N14 O14
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.

PAGE 1-A



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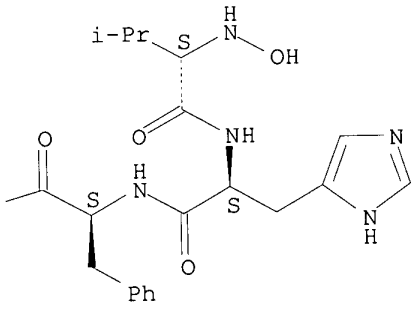

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> FIL REGISTRY

	SINCE FILE ENTRY	TOTAL SESSION
COST IN U.S. DOLLARS		
FULL ESTIMATED COST	10.24	72.77

	SINCE FILE ENTRY	TOTAL SESSION
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)		
CA SUBSCRIBER PRICE	0.00	-1.24

FILE 'REGISTRY' ENTERED AT 18:08:14 ON 24 SEP 2002

Property values tagged with IC are from the ZIC/VINITI data file

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provided by InfoChem.

STRUCTURE FILE UPDATES: 23 SEP 2002 HIGHEST RN 454421-17-1
DICTIONARY FILE UPDATES: 23 SEP 2002 HIGHEST RN 454421-17-1

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> SET TERMSET E#

SET COMMAND COMPLETED

=> DEL SEL Y

=> SEL L7 1 RN

E1 THROUGH E1 ASSIGNED

=> S E1/RN

L11 1 178274-00-5/RN

=> SET TERMSET LOGIN

SET COMMAND COMPLETED

=> FIL CAPLUS

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.46	73.23

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-1.24

FILE 'CAPLUS' ENTERED AT 18:08:25 ON 24 SEP 2002

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FILE COVERS 1907 - 24 Sep 2002 VOL 137 ISS 13
FILE LAST UPDATED: 23 Sep 2002 (20020923/ED)

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.

CAS roles have been modified effective December 16, 2001. Please
check your SDI profiles to see if they need to be revised. For
information on CAS roles, enter HELP ROLES at an arrow prompt or use
the CAS Roles thesaurus (/RL field) in this file.

=> S L11

L12   1 L11

=> d hist

     (FILE 'HOME' ENTERED AT 17:59:03 ON 24 SEP 2002)

     FILE 'REGISTRY' ENTERED AT 17:59:37 ON 24 SEP 2002
L1   1 S KSHGRTQDENPVVHFFKNIVT/SQEP
L2   1 S TQDENPVVHFFKNIVTPR/SQEP
L3   1 S KNIVTPRTPPPSQGKG/SQEP
L4   2 S NPVVHFFKNI/SQEP
L5   1 S PVVHFFKNIV/SQEP
L6   1 S VVHFFKNIVT/SQEP
L7   2 S VHFFKNIVTP/SQEP

     FILE 'REGISTRY' ENTERED AT 18:02:13 ON 24 SEP 2002
                SET TERMSET E#
                DEL SEL Y
                SEL L1 1 RN
L8   1 S E1/RN
                SET TERMSET LOGIN

     FILE 'CAPLUS' ENTERED AT 18:02:23 ON 24 SEP 2002
L9   3 S L8
L10   1 S L2

     FILE 'REGISTRY' ENTERED AT 18:05:04 ON 24 SEP 2002

     FILE 'CAPLUS' ENTERED AT 18:05:34 ON 24 SEP 2002

     FILE 'REGISTRY' ENTERED AT 18:05:55 ON 24 SEP 2002

     FILE 'CAPLUS' ENTERED AT 18:05:55 ON 24 SEP 2002

     FILE 'REGISTRY' ENTERED AT 18:06:54 ON 24 SEP 2002

     FILE 'REGISTRY' ENTERED AT 18:08:14 ON 24 SEP 2002
                SET TERMSET E#
                DEL SEL Y
                SEL L7 1 RN
L11   1 S E1/RN
                SET TERMSET LOGIN

     FILE 'CAPLUS' ENTERED AT 18:08:25 ON 24 SEP 2002
L12   1 S L11

=> d 16

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YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:n

=> FIL REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.79	74.02

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-1.24

FILE 'REGISTRY' ENTERED AT 18:09:33 ON 24 SEP 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 23 SEP 2002 HIGHEST RN 454421-17-1
DICTIONARY FILE UPDATES: 23 SEP 2002 HIGHEST RN 454421-17-1

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> SET TERMSET E#

SET COMMAND COMPLETED

=> DEL SEL Y

=> SEL L6 1 RN

E1 THROUGH E1 ASSIGNED

=> S E1/RN

L13 1 171205-21-3/RN

=> SET TERMSET LOGIN

SET COMMAND COMPLETED

=> FIL CAPLUS

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.46	74.48

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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-1.24

FILE 'CAPLUS' ENTERED AT 18:09:44 ON 24 SEP 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 24 Sep 2002 VOL 137 ISS 13
FILE LAST UPDATED: 23 Sep 2002 (20020923/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> S L13

L14 4 L13

=> FIL REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.40	74.88

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-1.24

FILE 'REGISTRY' ENTERED AT 18:10:08 ON 24 SEP 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 23 SEP 2002 HIGHEST RN 454421-17-1
DICTIONARY FILE UPDATES: 23 SEP 2002 HIGHEST RN 454421-17-1

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

09921880

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> SET TERMSET E#

SET COMMAND COMPLETED

=> DEL SEL Y

=> SEL L5 1 RN

E1 THROUGH E1 ASSIGNED

=> S E1/RN

L15 1 160219-24-9/RN

=> SET TERMSET LOGIN

SET COMMAND COMPLETED

=> FIL CAPLUS

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.46	75.34

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-1.24

FILE 'CAPLUS' ENTERED AT 18:10:18 ON 24 SEP 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 24 Sep 2002 VOL 137 ISS 13
FILE LAST UPDATED: 23 Sep 2002 (20020923/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use

the CAS Roles thesaurus (/RL field) in this file.

=> S L15

L16 4 L15

=> FIL REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.40	75.74

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-1.24

FILE 'REGISTRY' ENTERED AT 18:10:50 ON 24 SEP 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 23 SEP 2002 HIGHEST RN 454421-17-1
DICTIONARY FILE UPDATES: 23 SEP 2002 HIGHEST RN 454421-17-1

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> SET TERMSET E#

SET COMMAND COMPLETED

=> DEL SEL Y

=> SEL L4 1 RN

E1 THROUGH E1 ASSIGNED

=> S E1/RN

L17 1 178273-98-8/RN

=> SET TERMSET LOGIN

SET COMMAND COMPLETED

=> FIL CAPLUS

COST IN U.S. DOLLARS	SINCE FILE	TOTAL

09921880

	ENTRY	SESSION
FULL ESTIMATED COST	0.46	76.20

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-1.24

FILE 'CAPLUS' ENTERED AT 18:11:00 ON 24 SEP 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 24 Sep 2002 VOL 137 ISS 13
FILE LAST UPDATED: 23 Sep 2002 (20020923/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> S L17

L18 1 L17

=> FIL REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.40	76.60

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-1.24

FILE 'REGISTRY' ENTERED AT 18:11:33 ON 24 SEP 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 23 SEP 2002 HIGHEST RN 454421-17-1
DICTIONARY FILE UPDATES: 23 SEP 2002 HIGHEST RN 454421-17-1

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> SET TERMSET E#

SET COMMAND COMPLETED

=> DEL SEL Y

=> SEL L3 1 RN

E1 THROUGH E1 ASSIGNED

=> S E1/RN

L19 1 144449-94-5/RN

=> SET TERMSET LOGIN

SET COMMAND COMPLETED

=> FIL CAPLUS

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.46	77.06

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-1.24

FILE 'CAPLUS' ENTERED AT 18:11:44 ON 24 SEP 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 24 Sep 2002 VOL 137 ISS 13
FILE LAST UPDATED: 23 Sep 2002 (20020923/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

09921880

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> S L19

L20 4 L19 .

=> FIL REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.40	77.46

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-1.24

FILE 'REGISTRY' ENTERED AT 18:12:17 ON 24 SEP 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 23 SEP 2002 HIGHEST RN 454421-17-1
DICTIONARY FILE UPDATES: 23 SEP 2002 HIGHEST RN 454421-17-1

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> SET TERMSET E#

SET COMMAND COMPLETED

=> DEL SEL Y

=> SEL L2 1 RN

E1 THROUGH E1 ASSIGNED

=> S E1/RN

L21 1 346426-60-6/RN

=> SET TERMSET LOGIN

SET COMMAND COMPLETED

08/03/01

09921880

=> FIL CAPLUS

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.46	77.92

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-1.24

FILE 'CAPLUS' ENTERED AT 18:12:27 ON 24 SEP 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 24 Sep 2002 VOL 137 ISS 13
FILE LAST UPDATED: 23 Sep 2002 (20020923/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> S L21

L22 1 L21

=> d hist

(FILE 'HOME' ENTERED AT 17:59:03 ON 24 SEP 2002)

FILE 'REGISTRY' ENTERED AT 17:59:37 ON 24 SEP 2002
L1 1 S KSHGRTQDENPVVHFFKNIVT/SQEP
L2 1 S TQDENPVVHFFKNIVTPR/SQEP
L3 1 S KNIVTPRTPPPSQGKG/SQEP
L4 2 S NPVVHFFKNI/SQEP
L5 1 S PVVHFFKNIV/SQEP
L6 1 S VVHFFKNIVT/SQEP
L7 2 S VHFFKNIVTP/SQEP

FILE 'REGISTRY' ENTERED AT 18:02:13 ON 24 SEP 2002
SET TERMSET E#
DEL SEL Y
SEL L1 1 RN
L8 1 S E1/RN
SET TERMSET LOGIN

```
     FILE 'CAPLUS' ENTERED AT 18:02:23 ON 24 SEP 2002
L9             3 S L8
L10            1 S L2

     FILE 'REGISTRY' ENTERED AT 18:05:04 ON 24 SEP 2002

     FILE 'CAPLUS' ENTERED AT 18:05:34 ON 24 SEP 2002

     FILE 'REGISTRY' ENTERED AT 18:05:55 ON 24 SEP 2002

     FILE 'CAPLUS' ENTERED AT 18:05:55 ON 24 SEP 2002

     FILE 'REGISTRY' ENTERED AT 18:06:54 ON 24 SEP 2002

     FILE 'REGISTRY' ENTERED AT 18:08:14 ON 24 SEP 2002
                SET TERMSET E#
                DEL SEL Y
                SEL L7 1 RN
L11            1 S E1/RN
                SET TERMSET LOGIN

     FILE 'CAPLUS' ENTERED AT 18:08:25 ON 24 SEP 2002
L12            1 S L11

     FILE 'REGISTRY' ENTERED AT 18:09:33 ON 24 SEP 2002
                SET TERMSET E#
                DEL SEL Y
                SEL L6 1 RN
L13            1 S E1/RN
                SET TERMSET LOGIN

     FILE 'CAPLUS' ENTERED AT 18:09:44 ON 24 SEP 2002
L14            4 S L13

     FILE 'REGISTRY' ENTERED AT 18:10:08 ON 24 SEP 2002
                SET TERMSET E#
                DEL SEL Y
                SEL L5 1 RN
L15            1 S E1/RN
                SET TERMSET LOGIN

     FILE 'CAPLUS' ENTERED AT 18:10:18 ON 24 SEP 2002
L16            4 S L15

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                SEL L4 1 RN
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                SEL L3 1 RN
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L20             4 S L19

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                 SEL L2 1 RN
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L22              1 S L21

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=> d l23 1-8 py

L23  ANSWER 1 OF 8  CAPLUS  COPYRIGHT 2002 ACS
PY   2001
     1993
     2001
     2002

L23  ANSWER 2 OF 8  CAPLUS  COPYRIGHT 2002 ACS
PY   1998
     1998
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     2000
     2001
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L23  ANSWER 3 OF 8  CAPLUS  COPYRIGHT 2002 ACS
PY   1996
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     2001
     2001
     2002
     1997
     1997

L23  ANSWER 4 OF 8  CAPLUS  COPYRIGHT 2002 ACS
PY   1995

L23  ANSWER 5 OF 8  CAPLUS  COPYRIGHT 2002 ACS
PY   1994
     1994
     1994
     1996
     1996
     1996
     1996
     1998
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L23 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2002 ACS
PY 1993

L23 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2002 ACS
PY 1993
1993
1993
1994
1998
1994
1994

L23 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2002 ACS
PY 1992

=> d l23 au so ti ab

L23 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2002 ACS
IN Warren, Kenneth G.; Catz, Ingrid
SO U.S., 41 pp., Cont.-in-part of U.S. Ser. No. 7,520.
CODEN: USXXAM
TI Peptides neutralizing anti-myelin basic protein antibodies and the administration of myelin basic protein peptides to multiple sclerosis patients
AB Human myelin basic protein (h-MBP) has a mol. wt. of 18.5 KD and contains 170 amino acid residues. Synthetic peptides ranging in length from about 8 to 25 residues and covering the entire length of the protein have been produced. Antibodies to h-MBP (anti-MBP) were found to be neutralized by the synthetic peptides, in vitro, which span the h-MBP from about amino acid residue 61 to about amino acid residue 106. The peptides, which cover both the amino (about residues 1 to 63) and carboxy (about residues 117 to 162) terminals of h-MBP did not neutralize purified anti-MBP. Intrathecal administration of peptide MBP(75-95), MBP(86-95), or MBP(82-98) produced complete binding-neutralization of free (F) anti-MBP with no change in bound (B) levels. A control peptide MBP35-58 had no effect on F or B anti-MBP levels. I.v. administration of MBP(75-95), MBP(86-95), or MBP(82-98) resulted in significant decline of F and B CSF anti-MBP levels. Administration of MBP synthetic peptides to MS patients either intrathecally or i.v. did not have any adverse neurol. effects and systemic complications did not occur. The MBP epitope for MS anti-MBP has been localized to an area between amino acid 86 and amino acid 95.

=> d l23 1-8 py pn so

L23 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2002 ACS
PY 2001
1993
2001
2002

	PATENT NO.	KIND	DATE
PI	US 6252040	B1	20010626
	CA 2053799	AA	19930423
	US 6258781	B1	20010710
	US 2002111312	A1	20020815

SO U.S., 41 pp., Cont.-in-part of U.S. Ser. No. 7,520.
CODEN: USXXAM

L23 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2002 ACS

09921880

PY 1998
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1999

	PATENT NO.	KIND	DATE
PI	WO 9845327	A1	19981015
	CA 2201841	AA	19981004
	AU 9869130	A1	19981030
	EP 970121	A1	20000112
	JP 2001518885	T2	20011016
	NO 9904806	A	19991206

SO PCT Int. Appl., 75 pp.
CODEN: PIXXD2

L23 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2002 ACS
PY 1996
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	PATENT NO.	KIND	DATE
PI	WO 9612731	A1	19960502
	CA 2203018	AA	19960502
	AU 9536478	A1	19960515
	AU 713546	B2	19991202
	EP 789709	A1	19970820
	EP 789709	B1	20010523
	HU 76977	A2	19980128
	HU 217633	B	20000328
	RU 2157815	C2	20001020
	ES 2159322	T3	20011001
	RO 117096	B1	20011030
	PL 182508	B1	20020131
	FI 9701662	A	19970617
	NO 9701829	A	19970623

SO PCT Int. Appl., 52 pp.
CODEN: PIXXD2

L23 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2002 ACS
PY 1995
SO Proceedings of the National Academy of Sciences of the United States of America (1995), 92(24), 11061-5
CODEN: PNASA6; ISSN: 0027-8424

L23 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2002 ACS
PY 1994
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	PATENT NO.	KIND	DATE
PI	WO 9420127	A1	19940915
	CA 2157510	AA	19940915
	AU 9463594	A1	19940926
	CN 1118572	A	19960313
	EP 703783	A1	19960403
	JP 08507525	T2	19960813
	BR 9406652	A	19960910
	AU 9865979	A1	19980702

SO PCT Int. Appl., 138 pp.
CODEN: PIXXD2

L23 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2002 ACS
PY 1993
SO Journal of Neuroimmunology (1993), 43(1-2), 87-96
CODEN: JNRIDW; ISSN: 0165-5728

L23 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2002 ACS
PY 1993
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	PATENT NO.	KIND	DATE
PI	WO 9308212	A1	19930429
	CA 2053799	AA	19930423
	AU 9227500	A1	19930521
	EP 610446	A1	19940817
	RU 2121850	C1	19981120
	NO 9401415	A	19940622
	FI 9401860	A	19940421

SO PCT Int. Appl., 25 pp.
CODEN: PIXXD2

L23 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2002 ACS
PY 1992
SO J. Neuroimmunol. (1992), 39(1-2), 81-9
CODEN: JNRIDW; ISSN: 0165-5728

=> FIL BIOSIS MEDLINE CAPLUS EMBASE SCISEARCH

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	19.56	97.48

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-0.62	-1.86

FILE 'BIOSIS' ENTERED AT 18:15:36 ON 24 SEP 2002

08/03/01

09921880

FILE 'MEDLINE' ENTERED AT 18:15:36 ON 24 SEP 2002

FILE 'CAPLUS' ENTERED AT 18:15:36 ON 24 SEP 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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=> d l23 1-8 py pn so

L23 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2002 ACS
PY 2001
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	PATENT NO.	KIND	DATE
PI	US 6252040	B1	20010626
	CA 2053799	AA	19930423
	US 6258781	B1	20010710
	US 2002111312	A1	20020815

SO U.S., 41 pp., Cont.-in-part of U.S. Ser. No. 7,520.
CODEN: USXXAM

L23 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2002 ACS
PY 1998
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PI	WO 9845327	A1	19981015
	CA 2201841	AA	19981004
	AU 9869130	A1	19981030
	EP 970121	A1	20000112
	JP 2001518885	T2	20011016
	NO 9904806	A	19991206

SO PCT Int. Appl., 75 pp.
CODEN: PIXXD2

L23 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2002 ACS
PY 1996
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1997

PATENT NO.	KIND	DATE
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CA 2203018	AA	19960502
AU 9536478	A1	19960515
AU 713546	B2	19991202
EP 789709	A1	19970820
EP 789709	B1	20010523
HU 76977	A2	19980128
HU 217633	B	20000328
RU 2157815	C2	20001020
ES 2159322	T3	20011001
RO 117096	B1	20011030
PL 182508	B1	20020131
FI 9701662	A	19970617
NO 9701829	A	19970623

SO PCT Int. Appl., 52 pp.
CODEN: PIXXD2

L23 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2002 ACS
PY 1995
SO Proceedings of the National Academy of Sciences of the United States of America (1995), 92(24), 11061-5
CODEN: PNASA6; ISSN: 0027-8424

L23 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2002 ACS
PY 1994
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PATENT NO.	KIND	DATE
PI WO 9420127	A1	19940915
CA 2157510	AA	19940915
AU 9463594	A1	19940926
CN 1118572	A	19960313
EP 703783	A1	19960403
JP 08507525	T2	19960813
BR 9406652	A	19960910
AU 9865979	A1	19980702

SO PCT Int. Appl., 138 pp.
CODEN: PIXXD2

L23 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2002 ACS
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SO Journal of Neuroimmunology (1993), 43(1-2), 87-96
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L23 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2002 ACS
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	CA 2053799	AA	19930423
	AU 9227500	A1	19930521
	EP 610446	A1	19940817
	RU 2121850	C1	19981120
	NO 9401415	A	19940622
	FI 9401860	A	19940421

SO PCT Int. Appl., 25 pp.
CODEN: PIXXD2

L23 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2002 ACS
PY 1992
SO J. Neuroimmunol. (1992), 39(1-2), 81-9
CODEN: JNRIDW; ISSN: 0165-5728

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